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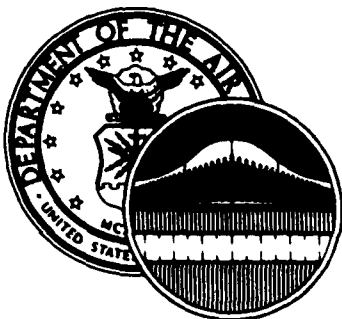
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UNITED STATES AIR FORCE

OCCUPATIONAL SURVEY REPORT

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ELECTRONICS PRINCIPLES INVENTORY (EPI)

AUTOMATIC TRACKING RADAR CAREER LADDER

AFSC-303X3

AFPT-90-XXX-222

FEB 1981

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OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT CENTER
AIR TRAINING COMMAND
RANDOLPH AFB, TEXAS 78148

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PREFACE

This report presents the preliminary results of an Air Force Electronics Principles Survey of the Automatic Tracking Radar career ladder (AFSC 303X3). The project was undertaken at the request of Mr. James R. Haupt, Training Manager, Keesler AFB, MS. Authority for conducting electronics principles inventories is contained in AFR 35-2. Computer printouts from which the report was produced are available for use by operating and training officials.

The Electronics Principles Inventory (EPI) was originally developed by Mr. Hendrick W. Ruck and Major Thomas J. O'Conner in 1976. It was revised and updated by Mr. James L. Slovak, Inventory Development Specialist, and Captain Frederick B. Bower, Jr., Occupational Survey Analyst, in 1979.

Captain Michael D. Hill and Mr. Guy B. Cole analyzed the data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis section, Occupational Analysis Branch, USAF Occupational Measurement Center, Randolph AFB, Texas 78148.

Copies of this report are available to air staff sections, major commands, and other interested training and management personnel upon request to the USAF Occupational Measurement Center, attention to the Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78148.

This report has been reviewed and is approved.

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ELECTRONIC PRINCIPLES INVENTORY REPORT
AUTOMATIC TRACKING RADAR CAREER LADDER
(AFSC 303X3)

INTRODUCTION

This is a preliminary report of the Electronic Principles Survey of the Automatic Tracking Radar career ladder (AFSC 303X3). It was completed by the Occupational Analysis Branch, USAF Occupational Measurement Center in February 1981. This preliminary report is intended primarily to provide an overview of electronic principles data by skill levels for immediate use by technical training school personnel. A more comprehensive display of the electronic principles data will be provided in a follow-on report to be published in a few months.

Purpose

The aim of the electronic principles survey program is to provide reliable data on the extent electronic fundamentals training is actually used in the performance of various Air Force jobs.

General Background

The EPI is a knowledge based job inventory which identifies the range of electronic principles personnel must understand to perform any electronics oriented job. Training managers can use EPI data in conjunction with OSR data to determine precisely what specialists do and what electronic principles they employ on the job. By using EPI and OSR data in this manner, training managers satisfy one of the most important aspects of the instructional systems development (ISD) process:

Determine what specialists do on the job before developing a course to train individuals to perform the job.

The USAF Occupational Measurement Center provides job performance data to training personnel in the form of occupational survey reports and training extracts. Such data are presented in task statements which are quantified according to percent members performing, percent time spent, task difficulty, and training emphasis. This task statement data provides a very precise picture of the kinds of functions personnel in a specific AFSC or shred actually perform at a specific point in time. If OSR data is properly applied, it can be a powerful tool in the design of training content.

However, OSR task statements are difficult to translate into knowledge requirements. This is especially true of tasks which require some degree of electronic knowledge. Prior to the development of the EPI, training managers and command representatives had to rely on subjective interpretations of task statements to arrive at the kinds of knowledge required to perform electronic oriented tasks. This requirement of a more objective criteria for determining the amount of electronic knowledge necessary to perform the job resulted in the development of the EPI.

History

The initial request to develop a method of determining electronic fundamentals used on the job was made by Major General Charles G. Cleveland, the Deputy Chief of Staff, Technical Training, Air Training Command, in 1974. At the time, General Cleveland needed some means of accurately measuring how much electronic fundamentals training was actually used on the job. He envisioned using EPI data to streamline training by eliminating "nice to know" information in the area of electronic theory.

At the general's request, Dr. Walter E. Driskill, Chief of the Occupational Analysis Branch, set up a task force to conceptualize, develop, and apply a method for measuring job usage of electronic principles. The task force was composed of personnel from the Occupational Analysis Branch who were well qualified in theoretical physics and electronics. These personnel also had considerable expertise in task analysis and survey development. With the assistance by these individual, electronic experts from five ATC Technical Training Centers, averaging 12 years maintenance experience and four years of electronic principles instruction experience, spent three weeks working on the development of the EPI. This tentative EPI was then reviewed and refined by over 300 maintenance personnel from SAC, TAC, ADC, MAC, and AFSC as well as personnel at the Electronic Engineering Department of the USAF Academy and the Air Force Human Resources Laboratory. The resulting EPI contained 1,257 items under 62 subject matter areas covering all electronic principles training given at the five ATC Technical Training Centers.

During 1977, this EPI was administered to more than 11,000 airmen in 54 different Air Force specialties. Since the aim of the EPI was to determine the extent electronic fundamentals training was actually used in the performance of Air Force jobs, the logical person to survey was one at the worker level with sufficient time on the job to understand all that it entailed. Consequently, only 5-skill level personnel with more than 18 months active duty service were surveyed. Results from this project were used extensively by the various training managers to refine their respective plans of instruction.

This original EPI was revised in 1978 and 1979 to more accurately reflect some of the computer oriented and various other electronic principles. The revision was accomplished by Mr. James L. Slovak, Inventory Development Specialist, and Captain Frederick B. Bower, Jr., Occupational Survey Analyst, after consultation with electronic principles instructors at each of the technical training centers. Following this extensive review, the EPI was reprinted in its current format.

Description

The EPI differs from the usual task oriented survey in two major respects. First, the EPI asks two general questions: "what do you do?" and "what electronic knowledge do you use in performing your job?" The usual task survey concentrates on only one question: "what do you do?" The second difference is the EPI can be administered to anyone who works with electronics. That is, it is general in nature, unlike the usual job inventory which is aimed at a single specialty within a career field.

Administration

This Electronic Principles inventory was administered to personnel in the Automatic Tracking Radar (AFS 303X3) career ladder during the period January through June 1980. Personnel were selected to participate in this survey so as to insure an accurate representation across all MAJCOMs and paygrade groups. Table 1 reflects the major command distribution of personnel assigned as of the fall of 1980 and the distribution of incumbents in the survey sample. The 316 members making up the final sample represent 27 percent of the 1,161 total assigned. Table 2 shows the paygrade distribution of the sample as compared to the assigned strength. Although the number of airmen sampled was quite small, the sampling in the E-4 through E-6 was very adequate and should provide an accurate representation of electronic principles characteristically used by personnel in this ladder.

TABLE 1
COMMAND REPRESENTATION OF SURVEY SAMPLE

<u>MAJOR COMMAND</u>	<u>PERCENT ASSIGNED</u>	<u>PERCENT SAMPLED</u>
SAC	50	62
TAC	28	25
PACAF	4	3
ATC	3	4
AFSC	3	4
USAFE	2	1
AFCC	1	1
AAC	1	0
OTHER	<u>8</u>	<u>0</u>
TOTAL	100	100

TOTAL 303X3 ASSIGNED - 1,161
TOTAL 303X3 SAMPLED - 316
PERCENT SAMPLED - 27%

TABLE 2
PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

<u>PAYGRADE</u>	<u>PERCENT ASSIGNED</u>	<u>PERCENT SAMPLED</u>
AIRMEN	31	3
E-4	31	33
E-5	32	37
E-6	10	18
E-7	6	8
E-8	*	0
NOT REPORTED	-	1
TOTAL	100	100

PRESENTATION OF RESULTS

Personnel responded "yes" or "no" to the 1,332 electronic principles questions as related to their present job. A Group Summary (GPSUM) computer printout is provided in the Appendix portion of this report. Page 1 of the GPSUM lists the six selected groups identified for this report. Pages 2-46 show the percentage of the incumbents responding to the EPI items. The computer program results display the percent members answering "yes" to the subject area questions. The reader can locate a specific subject area by referring to the Appendix page number as listed in Table 3. For example, the Transformers area results are given on pages 6-7 of the GPSUM. The percentage of survey respondents indicating use of specific electronic principles ranged from high in areas such as Meters/Multimeters (p. 3), Soldering (p. 10), and Oscilloscopes (p. 12) to low in areas such as Infrared (pp. 42-43), Lasers (pp. 43-44), and Display Tubes (p. 44-45). The 3-skill level column is presented for comparison purposes only. Because of the small sample size of this group, these 3-skill level data should not be used in developing training standards or plans of instruction.

TABLE 3
EPI SUBJECT AREAS

<u>SEQUENCE OF SUBJECT AREAS</u>	<u>SUBJECT AREAS TITLE</u>	<u>BEGINNING ITEM NUMBER</u>	<u>GPSUM PAGE NUMBER</u>
1	MATHEMATICS	A1	2
2	DIRECT CURRENT AND VOLTAGE	A16	2
3	RESISTORS/RESISTIVE CIRCUIT	A29	2
4	METER/MULTIMETER	B64	3
5	ALTERNATING CURRENT	B72	4
6	INDUCTORS/INDUCTIVE REACTANCE	B79	4
7	CAPACITORS AND CAPACITIVE	C104	5
8	TRANSFORMERS	C136	6
9	MAGNETISM	C176	7
10	RCL CIRCUITS	D188	7
11	TIME CONSTANTS	D234	9
12	FILTERS	D241	9
13	COUPLING	E257	10
14	SOLDERING	E268	10
15	RELAYS	E281	11
16	MICROPHONES AND SENSING DEVICES	F299	11
17	SPEAKERS	F313	12
18	OSCILLOSCOPES	F328	12
19	SEMICONDUCTOR DIODES	G346	12
20	TRANSISTORS	G388	14
21	TRANSISTOR AMPLIFIERS	G412	15
22	SOLID-STATE SPECIAL PURPOSE DEVICES	H458	17
23	POWER SUPPLIES	H472	18
24	OSCILLATORS	H502	19
25	MULTIVIBRATORS	I533	19
26	LIMITERS AND CLAMPERS	I548	20
27	ELECTRON TUBES	I558	20
28	ELECTRON TUBE AMPLIFIERS AND CIRCUITS	J597	21
29	SPECIAL PURPOSE ELECTRON TUBES	J604	22
30	HETERODYNING AND MODULATION-DE MODULATION (MODEMS)	J618	22
31	AM SYSTEMS	K625	22
32	FM SYSTEMS	K645	23
33	NUMBERING SYSTEMS	K667	24
34	LOGIC FUNCTIONS	L691	25
35	BOOLEAN EQUATIONS	L724	26
36	COUNTERS	L736	27
37	TIMING CIRCUITS	L758	27
38	USE OF SIGNAL GENERATORS	M770	28

TABLE 3 (CONTINUED)

EPI SUBJECT AREAS

<u>SEQUENCE OF SUBJECT AREAS</u>	<u>SUBJECT AREAS TITLE</u>	<u>BEGINNING ITEM NUMBER</u>	<u>GPSUM PAGE NUMBER</u>
39	MOTORS AND GENERATORS	M784	28
40	METER MOVEMENTS	N814	29
41	SATURABLE REACTORS AND MAGNETIC AMPLIFIERS	N826	29
42	WAVESHAPING CIRCUITS	N838	30
43	SINGLE OR INDEPENDENT SIDEBAND SYSTEMS	0852	30
44	PULSE MODULATION SYSTEMS	0882	31
45	ANTENNAS	0922	33
46	TRANSMISSION LINES	P965	34
47	WAVEGUIDES AND CAVITY RESONATORS	P995	35
48	MICROWAVE AMPLIFIERS AND OSCILLATORS	P1038	37
49	REGISTERS	Q1115	39
50	STORAGE DEVICES	Q1122	40
51	DIGITAL TO ANALOG AND ANALOG TO DIGITAL CONVERTERS	Q1149	41
52	PHANTASTRONS	Q1165	41
53	SCHMITT TRIGGERS	Q1166	41
54	CABLE FABRICATION	R1169	41
55	INPUT/OUTPUT (PERIPHERAL) DEVICES	S1171	41
56	PHOTO SENSITIVE DEVICES	S1185	42
57	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS)	S1186	42
58	INFRARED SYSTEMS	T1195	42
59	LASERS	T1223	43
60	DISPLAY TUBES	T1257	44
61	TELEVISION	T1273	45
62	PROGRAMMING	U1283	45
63	DB AND POWER RATIOS	U1327	46

APPENDIX A

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

PCT MBR\$ RESP 'YES'-- 303X3 DAFSC/CONUS/OS GRPS

TABULATION OF PERCENT MEMBERS RESPONDING 'YES' TO USE OF ELECTRONIC PRINCIPLES
BY 303X3 DAFSC/CONUS/OS SEAS GROUPS IN THE 303X1,2,3 EPI CAREER FIELD.

REPORTS ON THE FOLLOWING GROUPS WERE REQUESTED

GROUP IDENTITY = SPC018	ALL AMN DAFSC	303X3 - ALL	CONTAINING	316 MEMBERS.
GROUP IDENTITY = SPC019	ALL AMN DAFSC	30333 - 3 SKL	CONTAINING	1 MEMBERS.
GROUP IDENTITY = SPC020	ALL AMN DAFSC	30353 - 5 SKL	CONTAINING	195 MEMBERS.
GROUP IDENTITY = SPC021	ALL AMN DAFSC	30373 - 7 SKL	CONTAINING	120 MEMBERS.
GROUP IDENTITY = SPC022	ALL AMN DAFSC	30399 - 9 SKL	CONTAINING	12 MEMBERS.
GROUP IDENTITY = SPC027	ALL AMN DAFSC	30353 IN CONUS - CONUS	CONTAINING	34 MEMBERS.
GROUP IDENTITY = SPC028	ALL AMN DAFSC	30353 OVERSEAS - OVERSEAS	CONTAINING	160 MEMBERS.

PCT MBRS RESP *YES*- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOPC (ATC) RANCOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

0Y-TSK

	ALL	3	5	7	9	5	5
	SPC	SPC	SPC	SPC	SPC	US	O's
	018	C19	C20	021	022	027	028
A 41 3 RESISTORS - USE COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE	64	100	69	56	92	56	72
A 42 3 RESISTORS - USE COLOR CODES WHICH INDICATE TOLERANCE	61	100	65	54	92	50	68
A 43 3 RESISTORS - USE COLOR CODES WHICH INDICATE FAILURE RATE	27	0	29	22	33	15	32
A 44 3 RESISTORS - USE OR REFER TO SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES	62	100	66	55	75	52	67
A 45 3 RESISTIVE CIRCUITS - SERIES - USE OR REFER TO TOTAL RESISTANCE IN	54	0	56	51	83	41	59
A 46 3 RESISTIVE CIRCUITS - SERIES - USE OR REFER TO TOTAL CURRENT IN	53	0	55	49	83	44	58
A 47 3 RESISTIVE CIRCUITS - SERIES - USE OR REFER TO INDIVIDUAL VOLTAGE DROPS IN	52	0	54	49	83	35	59
A 48 3 RESISTIVE CIRCUITS - SERIES - USE OR REFER TO POWER DISSIPATION IN	39	0	34	40	75	24	42
A 49 3 RESISTIVE CIRCUITS - SERIES - USE OR REFER TO TOTAL RESISTANCE IN	53	0	57	47	83	41	61
A 50 3 RESISTIVE CIRCUITS - SERIES - USE OR REFER TO TOTAL CURRENT IN	51	0	55	45	83	38	59
A 51 3 RESISTIVE CIRCUITS - SERIES PARALLEL - USE OR REFER TO INDIVIDUAL VOLTAGE DROPS IN	51	0	54	47	75	35	59
A 52 3 RESISTIVE CIRCUITS - SERIES PARALLEL - USE OR REFER TO INDIVIDUAL BRANCH CURRENTS IN	43	0	45	42	75	25	48
A 53 3 RESISTIVE CIRCUITS - SERIES PARALLEL - USE OR REFER TO POWER DISSIPATION IN	37	0	39	34	75	21	43
A 54 3 PARALLEL RESISTIVE CIRCUITS - USE OR REFER TO TOTAL RESISTANCE IN	55	0	58	51	75	44	62
A 55 3 PARALLEL RESISTIVE CIRCUITS - USE OR REFER TO TOTAL CURRENT IN	53	0	56	47	75	44	59
A 56 3 PARALLEL RESISTIVE CIRCUITS - USE OR REFER TO INDIVIDUAL VOLTAGE DROPS IN	50	0	52	47	75	32	56
A 57 3 RESISTIVE PARALLEL CIRCUITS - USE OR REFER TO INDIVIDUAL BRANCH CURRENTS IN	45	0	45	46	75	29	49
A 58 3 RESISTIVE PARALLEL CIRCUITS - USE OR REFER TO POWER DISSIPATION IN	35	0	36	34	67	24	40
A 59 3 SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS - CALCULATE TOTAL RESISTANCE FOR	49	0	51	47	67	41	54
A 60 3 SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS - CALCULATE TOTAL CURRENT FOR	47	0	44	45	67	41	49
A 61 3 SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS - CALCULATE INDIVIDUAL VOLTAGE DROPS FOR	46	0	47	46	67	32	50
A 62 3 SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS - CALCULATE INDIVIDUAL BRANCH CURRENTS FOR	41	0	41	42	67	29	43
A 63 3 SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS - CALCULATE POWER DISSIPATION FOR	33	0	31	35	58	24	34
B 64 1 METERS/MULTIMETERS - USE TO MEASURE RESISTANCE	66	100	73	54	75	71	74
B 65 1 METERS/MULTIMETERS - USE TO MEASURE VOLTAGE	68	100	75	57	75	74	76

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

QY-TSM

PERCENT MEMBERS PERFORMING									
0Y-TSK									
	ALL	SPC	SKL	SKL	SKL	SKL	SKL	SKL	SKL
	019	019	020	021	022	022	027	027	028
66 1 METERS/MULTIMETERS - USE TO MEASURE CURRENT	61	100	67	50	75	62	69		
67 1 METERS/MULTIMETERS - USE TO MEASURE POWER	61	100	67	52	75	68	67		
68 1 METERS/MULTIMETERS - USE TO MEASURE FREQUENCY	62	100	68	52	75	65	69		
69 1 METERS/MULTIMETERS - USE TO MEASURE TEMPERATURE	20	0	22	18	33	15	23		
70 1 METERS/MULTIMETERS - USE TO MEASURE PRESSURE	28	0	30	26	17	21	32		
71 1 METERS/MULTIMETERS - USE TO MEASURE LIGHT LEVELS	5	0	5	0	0	5	5		
72 2 AC - USE OR REFER TO EFFECTIVE VOLTAGE (RMS)	56	0	54	58	83	41	58	ALTERNATING CURRENT	
73 2 AC - USE OR REFER TO PEAK TO PEAK VOLTAGE	65	0	67	63	92	59	69		
74 2 AC - USE OR REFER TO AVERAGE VOLTAGE (DC)	62	0	63	62	75	62	63		
75 2 AC - USE OR REFER TO WAVE LENGTH	52	0	52	51	50	50	53		
76 2 AC - USE OR REFER TO FREQUENCY	74	100	74	74	83	68	76		
77 2 AC - USE OR REFER TO INSTANTANEOUS VALUE	24	0	20	30	50	18	20		
78 2 AC - USE OR REFER TO PHASE RELATIONSHIPS	66	0	65	67	75	54	67	INDUCTORS/INDUCTIVE REACTANCE	
79 3 INDUCTORS/INDUCTIVE REACTANCE- WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, OR CHOKE COILS	49	100	52	43	42	44	54		
80 3 INDUCTORS/INDUCTIVE REACTANCE - INSPECT INDUCTORS	54	0	59	46	75	50	62		
81 3 INDUCTORS/INDUCTIVE REACTANCE - CLEAN INDUCTORS	47	0	53	38	42	36	56		
82 3 INDUCTORS/INDUCTIVE REACTANCE - ADJUST INDUCTORS	47	0	49	42	33	41	51		
83 3 INDUCTORS/INDUCTIVE REACTANCE - MEASURE INDUCTORS	40	0	44	33	33	35	46		
84 3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO INDUCTANCE	50	0	55	43	42	44	57		
85 3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO HENRIES	42	0	45	37	42	39	49		
86 3 INDUCTANCE/INDUCTIVE REACTANCE - USE OR REFER TO INDUCTANCE	36	0	36	33	67	26	38		
87 3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO COPPER LOSS IN INDUCTORS	7	0	5	10	6	6	5		
88 3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS	8	0	7	11	8	5	7		
89 3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS	8	0	7	11	8	3	7		
90 3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF TURNS OF THE COIL	11	0	12	8	0	15	12		
91 3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS SECTIONAL AREA OF THE CORE	9	0	10	8	0	12	10		
92 3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS LENGTH	8	0	9	0	0	10	9		
93 3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE PERMEABILITY OF THE CORE MATERIAL	7	0	6	9	0	9	6		
94 3 INDUCTORS/INDUCTIVE REACTANCE - CALCULATE INDUCTANCE FOR PARTICULAR INDUCTORS USING FORMULAS	10	0	9	13	8	10	9		
95 3 INDUCTORS/INDUCTIVE REACTANCE - CALCULATE THE TOTAL INDUCTANCE FOR INDUCTANCE IN SERIES	15	0	14	12	8	15	14		
96 3 INDUCTORS/INDUCTIVE REACTANCE - CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN PARALLEL	15	0	14	17	8	15	14		

PCT MBRS RESP 'YES' - 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	ALL	3	5	7	9	5	5
	SKL	SKL	SKL	SKL	SKL	US	O's
	SPC	SPC	SPC	SPC	SPC	SPC	SPC
	C19	C20	C21	C22	C23	C24	C25
B 97 3 INDUCTORS/INDUCTIVE REACTANCE - CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN SERIES-PARALLEL CIRCUITS	14	0	13	17	8	15	13
B 98 3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS	25	0	25	27	25	12	27
B 99 3 INDUCTORS/INDUCTIVE REACTANCE - CALCULATE INDUCTIVE REACTANCE	17	0	15	20	33	9	17
B 100 3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTIONAL TO FREQUENCY	19	0	18	20	25	15	19
B 101 3 INDUCTORS/INDUCTIVE REACTANCE - WORK WITH POWER INDUCTORS	35	0	35	36	50	26	37
B 102 3 INDUCTORS/INDUCTIVE REACTANCE - WORK WITH AUDIO FREQUENCY INDUCTORS	23	0	24	23	33	12	26
B 103 3 INDUCTORS/INDUCTIVE REACTANCE - WORK WITH RADIO FREQUENCY INDUCTORS	43	0	45	41	67	18	47
C 104 1 CAPACITORS - WORK WITH CAPACITORS OR CIRCUITS CONTAINING CAPACITORS	60	100	64	53	67	62	65
C 105 1 CAPACITORS - INSPECT	60	100	66	52	83	65	66
C 106 1 CAPACITORS - CLEAN	53	0	60	42	42	56	61
C 107 1 CAPACITORS - ADJUST	53	0	57	47	33	47	59
C 108 1 CAPACITORS - TEST	55	0	62	46	33	56	63
C 109 1 CAPACITORS - DISCHARGE	60	100	66	50	42	59	67
C 110 1 CAPACITORS - MEASURE	49	0	55	39	50	50	56
C 111 1 CAPACITANCE - USE OR REFER TO DISTRIBUTED CAPACITANCE IN A DIELECTRIC	16	0	15	17	25	15	14
C 112 1 CAPACITANCE - USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC	3	0	3	3	8	3	2
C 113 1 CAPACITANCE - USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS	58	100	62	52	75	56	63
C 114 1 CAPACITANCE - USE OR REFER TO	57	0	61	52	83	50	63
C 115 1 CAPACITANCE - USE OR REFER TO DIELECTRIC CONSTANT	13	0	13	13	17	26	10
C 116 1 CAPACITANCE - USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS	46	0	48	43	75	47	49
C 117 1 CAPACITANCE - USE OR REFER TO CAPACITIVE REACTANCE	31	0	32	30	50	15	35
C 118 1 CAPACITANCE - USE OR REFER TO CAPACITOR COLOR CODES	33	0	35	31	67	41	33
C 119 1 CAPACITANCE - WORK WITH CAPACITORS IN DC CIRCUITS	59	100	63	53	67	53	65
C 120 1 CAPACITANCE - WORK WITH CAPACITORS IN AC CIRCUITS	60	100	64	52	67	59	66
C 121 1 CAPACITANCE - WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC	57	100	61	50	75	50	64
C 122 1 CAPACITANCE - CALCULATE FOR PARTICULAR CAPACITORS USING FORMULAS	11	0	11	11	17	12	10
C 123 1 CAPACITANCE - USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE DIELECTRIC CONSTANT	9	0	9	9	8	9	9
C 124 1 CAPACITANCE - USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO THE DIELECTRIC THICKNESS	9	0	9	11	8	12	7
C 125 1 CAPACITANCE - CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES	23	0	21	27	50	15	21

CAPACITORS AND CAPACITIVE
REACTANCE

PCT MBRS RESP 'YES'- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (AIC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	ALL	3	SKL	5	SKL	7	SKL	9	SKL	5	5	O's
	SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC
	018	019	020	021	022	023	024	025	026	027	028	029
C 126 1 CAPACITANCE - CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN PARALLEL	23	0	21	27	50	15	22					
C 127 1 CAPACITANCE - CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES-PARALLEL CIRCUITS	20	0	17	24	33	9	19					
C 128 1 CAPACITANCE - USE OP REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO	30	0	28	34	50	24	29					
C 129 1 CAPACITANCE - USE OP REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS	23	0	22	26	25	21	22					
C 130 1 CAPACITANCE - USE OP REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO FREQUENCY	21	0	19	24	25	18	20					
C 131 1 CAPACITANCE - CALCULATE CAPACITIVE REACTANCE	16	0	14	20	33	15	14					
C 132 1 CAPACITANCE - WORK WITH VARIABLE CAPACITORS	55	0	58	50	58	53	59					
C 133 1 CAPACITANCE - WORK WITH TRIMMER CAPACITORS	46	0	45	47	58	41	46					
C 134 1 CAPACITANCE - WORK WITH ELECTROLYTIC (FIXED) CAPACITORS	59	100	63	54	67	59	64					
C 135 1 CAPACITANCE - WORK WITH OTHER FIXED CAPACITORS	57	100	61	51	67	59	62					
C 136 2 TRANSFORMERS - WORK WITH	57	100	61	51	75	56	62					
C 137 2 TRANSFORMERS - INSPECT	59	0	64	52	83	59	66					
C 138 2 TRANSFORMERS - CLEAN	53	0	59	43	33	47	63					
C 139 2 TRANSFORMERS - ADJUST	42	0	44	41	17	38	44					
C 140 2 TRANSFORMERS - TROUBLESHOOT	53	0	55	50	42	50	56					
C 141 2 TRANSFORMERS - DISTINGUISH BETWEEN MUTUAL INDUCTANCE AND MUTUAL INDUCTANCE (M)	3	0	2	4	0	0	2					
C 142 2 TRANSFORMERS - USE THE SYMBOL FOR MUTUAL INDUCTANCE (M)	4	0	5	4	0	0	6					
C 143 2 TRANSFORMERS - REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH	12	0	13	10	8	12	13					
C 144 2 TRANSFORMERS - CALCULATE TURNS RATIOS USING CURRENT OR VOLTAGE RATIOS	16	0	14	20	17	12	14					
C 145 2 TRANSFORMERS - REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH	15	0	13	18	25	18	13					
C 146 2 TRANSFORMERS - CALCULATE IMPEDANCE INTERACTIONS FOR	5	0	4	7	8	0	4					
C 147 2 TRANSFORMERS - WORK WITH AUTOTRANSFORMERS	37	0	35	40	58	35	34					
C 148 2 TRANSFORMERS - WORK WITH POWER	59	100	63	54	67	62	63					
C 149 2 TRANSFORMERS - WORK WITH AUDIO	31	0	29	33	42	24	31					
C 150 2 TRANSFORMERS - WORK WITH RADIO FREQUENCY	49	0	51	47	75	56	51					
C 151 2 TRANSFORMERS - WORK WITH SATURABLE CORE	33	0	30	38	58	29	30					
C 152 2 TRANSFORMERS - CHECK FOR OPEN WINDOWS BY MEASURING RESISTANCE	55	0	60	47	42	53	62					
C 153 2 TRANSFORMERS - CHECK FOR SHORTED WINDINGS BY MEASURING RESISTANCE	53	0	58	46	33	57	59					
C 154 2 TRANSFORMERS - CHECK FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES	48	0	51	44	33	44	52					
C 155 2 TRANSFORMERS - MEASURE RESISTANCE OF WINDINGS TO DETERMINE STEP-UP OR STEP-DOWN TURNS RATIO	27	0	27	26	25	26	27					
C 156 2 TRANSFORMERS - MEASURE OUTPUT VOLTAGE TO DETERMINE STEP-UP OR STEP-DOWN TURNS RATIO	37	0	38	34	42	35	39					

PCT MBRS RESP 'YES' - 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSM

	ALL	3	5	7	9	5	5	O's
	SKL	SKL	SKL	SKL	SKL	LS	LS	
	SPC	SPC	SPC	SPC	SPC	SPC	SPC	
	018	019	020	021	022	027	028	
C 157 2 TRANSFORMERS - REFER TO BASIC SYMBOLS	60	100	65	52	83	59	67	
C 158 2 TRANSFORMERS - REFER TO MULTIPLE SECONDARY-WINDINGS SYMBOLS	56	0	59	51	83	56	60	
C 159 2 TRANSFORMERS - REFER TO MULTIPLE TAP SYMBOLS	56	0	60	50	75	59	61	
C 160 2 TRANSFORMERS - REFER TO CENTER TAP SYMBOLS FOR	57	100	61	50	83	56	62	
C 161 2 TRANSFORMERS - REFER TO AIR CORE SYMBOLS FOR	36	0	35	39	83	24	37	
C 162 2 TRANSFORMERS - REFER TO IRON CORE SYMBOLS FOR	41	0	41	42	83	44	40	
C 163 2 TRANSFORMERS - REFER TO VARIABLE TRANSFORMER SYMBOLS FOR	47	0	51	42	75	47	51	
C 164 2 TRANSFORMERS - REFER TO A COMBINATION OF SYMBOLS FOR	48	100	48	48	83	44	49	
C 165 2 TRANSFORMERS - DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES USING SCHEMATIC SYMBOLS	38	0	39	37	50	35	40	
C 166 2 TRANSFORMERS - DETERMINE OR REFER TO THE TYPE OF CORE	19	0	17	22	17	12	19	
C 167 2 TRANSFORMERS - REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO IS EQUAL TO THE VOLTAGE RATIO	27	0	25	29	33	15	27	
C 168 2 TRANSFORMERS - USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS	44	0	45	43	58	38	46	
C 169 2 TRANSFORMERS - CALCULATE VOLTAGE RATIOS USING TURNS RATIOS	19	0	16	24	8	6	19	
C 170 2 TRANSFORMERS - CALCULATE CURRENT RATIOS USING TURNS RATIOS	13	0	10	17	0	6	11	
C 171 2 TRANSFORMERS - USE THREE PHASE	43	0	44	42	75	38	45	
C 172 2 TRANSFORMERS - INSPECT THREE PHASE	38	0	39	37	83	38	39	
C 173 2 TRANSFORMERS - CLEAN OR LUBRICATE THREE PHASE	29	0	30	27	33	26	31	
C 174 2 TRANSFORMERS - ADJUST THREE PHASE	24	0	26	22	17	15	28	
C 175 2 TRANSFORMERS - TROUBLESHOOT THREE PHASE	31	0	31	30	42	24	31	
C 176 3 MAGNETISM - USE OR REFER TO PERMANENT MAGNETS	50	100	49	52	50	32	53	MAGNETISM
C 177 3 MAGNETISM - USE OR REFER TO TEMPORARY MAGNETS	25	0	24	27	8	12	27	
C 178 3 MAGNETISM - USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS	9	0	7	14	0	3	7	
C 179 3 MAGNETISM - USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS	9	0	6	13	0	0	6	
C 180 3 MAGNETISM - USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS	11	0	7	18	0	0	7	
C 181 3 MAGNETISM - USE OR REFER TO RESIDUAL MAGNETISM	17	0	15	22	0	6	16	
C 182 3 MAGNETISM - USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX	27	0	26	29	17	15	29	
C 183 3 MAGNETISM - USE OR REFER TO WEBER'S THEORY OF	3	0	3	5	0	3	2	
C 184 3 MAGNETISM - USE OR REFER TO DOMAIN THEORY OF	5	0	3	7	0	3	2	
C 185 3 MAGNETISM - USE OR REFER TO MAGNETIC INDUCTION	22	0	23	20	17	9	26	
C 186 3 MAGNETISM - USE OR REFER TO FLUX DENSITY	21	0	21	22	17	15	22	
C 187 3 MAGNETISM - USE OR REFER TO SATURABLE REACTANCE	20	0	16	27	33	12	16	
D 188 1 RCL CIRCUITS - WORK WITH RC, LR, OR RCL CIRCUITS	50	100	52	47	50	44	54	RCL CIRCUITS
D 189 1 RCL CIRCUITS - USE OR REFER TO VECTORS WHEN WORKING WITH WORKING WITH	16	0	16	16	17	15	16	
D 190 1 RCL CIRCUITS - USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH	16	0	15	19	0	16	14	
D 191 1 RCL CIRCUITS - USE OR REFER TO SINE WHEN WORKING WITH	25	0	27	21	33	26	27	
D 192 1 RCL CIRCUITS - USE OR REFER TO COSINE WHEN WORKING WITH	25	0	27	21	33	26	27	

PCT MORS RESP 'YES'-- 303X3 DAFSC/CONUS/05 GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

TASK	ALL	3	5			7			9			5		
			SKL	SPC	Q20	SKL	SPC	Q21	SKL	SPC	Q22	US	SPC	Q27
D 193 1 RCL CIRCUITS - USE OR REFER TO TANGENT WHEN WORKING WITH	21	0	24	17	33	24	24							
D 194 1 RCL CIRCUITS - USE OR REFER TO WATTS WHEN WORKING WITH	35	100	38	31	42	29	39							
D 195 1 RCL CIRCUITS - USE OR REFER TO TRUE POWER (PT) WHEN WORKING WITH	21	0	22	20	17	15	23							
D 196 1 RCL CIRCUITS - USE OR REFER TO MAXIMUM POWER (PA) WHEN WORKING WITH	26	0	28	22	25	24	29							
D 197 1 RCL CIRCUITS - USE OR REFER TO AVERAGE POWER (P AVE) WHEN WORKING WITH	32	0	33	31	25	26	34							
D 198 1 RCL CIRCUITS - USE OR REFER TO APPARENT POWER (PA) WHEN WORKING WITH	15	0	14	16	25	12	15							
D 199 1 RCL CIRCUITS - USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH	17	0	16	19	17	9	17							
D 200 1 RCL CIRCUITS - USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH	40	0	41	39	33	35	41							
D 201 1 RCL CIRCUITS - USE OR REFER TO BANDWIDTH WHEN WORKING WITH	42	100	43	41	17	38	44							
D 202 1 RCL CIRCUITS - USE OR REFER TO SELECTIVITY WHEN WORKING WITH	34	0	34	35	17	26	35							
D 203 1 RCL CIRCUITS - USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH	41	100	41	41	25	38	41							
D 204 1 RCL CIRCUITS - USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH	36	0	37	35	33	41	36							
D 205 1 RCL CIRCUITS - USE OR REFER TO BANDPASS REGION WHEN WORKING WITH	35	0	36	33	17	29	37							
D 206 1 RCL CIRCUITS - USE OR REFER TO CIRCUIT Q WHEN WORKING WITH	22	0	22	22	0	21	21							
D 207 1 RCL CIRCUITS - USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH	39	0	41	36	25	35	42							
D 208 1 RCL CIRCUITS - DETERMINE VALUES OF TRIGONOMETRIC FUNCTIONS USING FORMULAS	25	0	26	25	33	26	26							
D 209 1 RCL CIRCUITS - DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS	12	0	12	13	0	6	13							
D 210 1 RCL CIRCUITS - USE OR REFER TO TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS	19	0	18	19	0	9	20							
D 211 1 RCL CIRCUITS - USE OR REFER TO PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS	11	0	10	14	8	6	10							
D 212 1 RCL CIRCUITS - USE OR REFER TO TOTAL IMPEDANCE FOR SERIES	20	0	20	21	8	12	21							
D 213 1 RCL CIRCUITS - USE OR REFER TO IMPEDANCE ANGLES FOR SERIES	9	0	8	11	0	1	9							
D 214 1 RCL CIRCUITS - USE OR REFER TO APPARENT POWER (PA) FOR SERIES	12	0	11	14	8	9	11							
D 215 1 RCL CIRCUITS - USE OR REFER TO TRUE POWER (PT) FOR SERIES	14	0	13	15	25	6	14							
D 216 1 RCL CIRCUITS - USE OR REFER TO POWER FACTORS (PF) FOR SERIES	13	0	11	15	0	3	13							
D 217 1 RCL CIRCUITS - USE OR REFER TO TOTAL CURRENT FOR PARALLEL	24	0	25	22	25	18	26							
D 218 1 RCL CIRCUITS - USE OR REFER TO IMPEDANCE ANGLES FOR PARALLEL	7	0	7	8	1	3	7							

OCCUPATIONAL ANALYSIS PROGRAM USAFOMC (ATC) RANDOLPH AFB TX

PCT MBBS RESP 'YES'-- 303X3 DAFSC/CONUS/OS GRPS

TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

ALL	SKL	SKL	US	5	5	9	9	5	5
SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC
018	019	020	021	022	027	028	028	028	028

DT-TSK

- D 219 1 RCL CIRCUITS - USE THE ASSUMED VOLTAGE METHOD FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL
D 220 1 RCL CIRCUITS - USE OHM'S LAW FOR DETERMINING TOTAL IMPEDANCE FOR PARALLEL
D 221 1 RCL CIRCUITS - CHECK CAPACITORS USING OHMMETERS
D 222 1 RCL CIRCUITS - CHECK CAPACITORS USING SUBSTITUTION
D 223 1 RCL CIRCUITS - CHECK INDUCTORS USING OHMMETERS
D 224 1 RCL CIRCUITS - CHECK INDUCTORS USING SUBSTITUTION
D 225 1 RCL CIRCUITS - CHECK RESISTORS USING OHMMETERS
D 226 1 RCL CIRCUITS - CHECK RESISTORS USING SUBSTITUTION
D 227 1 RCL CIRCUITS - USE OR REFER TO THE RULE THAT PHASE ANGLE (THETA) = 0, POWER FACTOR (PF) = 1, AND APPARENT POWER (PA) = TRUE POWER (PT) FOR RESONANT CIRCUITS
D 228 1 RCL CIRCUITS - USE OR REFER TO RESONANT FREQUENCIES FOR
D 229 1 RCL CIRCUITS - USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT FREQUENCY
D 230 1 RCL CIRCUITS - USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT FREQUENCY FOR PARALLEL
D 231 1 RCL CIRCUITS - USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 OF THE PEAK CURRENT VALUE
D 232 1 RCL CIRCUITS - USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO THE QUALITY OF THE COIL (Q)
D 233 1 RCL CIRCUIT - DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE ANGLES
D 234 2 TIME CONSTANTS - WORK WITH, USE, OR REFER TO
D 235 2 TIME CONSTANTS - USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED OR (DISCHARGED) AFTER FIVE (5) TIME CONSTANTS - USE OR REFER TO UNIVERSAL CHARTS FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME FOR RC OR LR CIRCUITS
D 236 2 TIME CONSTANTS - USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO REACH SPECIFIC VALUES FOR RC OR LR CIRCUITS
D 237 2 TIME CONSTANTS - USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND COMPONENT VOLTAGES TO REACH SPECIFIC VALUES IN SPECIFIC TIMES
D 238 2 TIME CONSTANTS - USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE
D 239 2 TIME CONSTANTS - USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE
D 240 2 TIME CONSTANTS - USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE
D 241 3 FILTER CIRCUITS - WORK WITH
D 242 3 FILTER CIRCUITS - INSPECT

3	5	5	7	9	9	5	5	33	TIME CONSTANTS
ALL	SKL	SKL	US	5	5	9	9	5	
SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC	
018	019	020	021	022	027	028	028	028	
10	0	11	8	8	3	13	13	13	
28	0	31	24	25	29	31	31	31	
50	0	55	42	33	47	57	57	57	
37	0	40	32	17	26	43	43	43	
46	0	49	41	33	38	51	51	51	
31	0	33	27	17	26	35	35	35	
53	0	59	44	67	47	62	62	62	
31	0	34	26	25	24	37	37	37	
8	0	8	8	8	6	8	8	8	
33	0	31	36	33	24	32	32	32	
28	0	28	28	17	24	28	28	28	
22	0	21	24	8	18	21	21	21	
37	0	40	33	54	35	41	41	41	
13	0	10	17	8	9	10	10	10	
17	0	15	19	8	9	16	16	16	
32	100	31	32	42	21	33	33	33	
23	0	23	23	42	12	25	25	25	
9	0	9	12	33	6	9	9	9	
13	0	10	17	8	9	10	10	10	
11	0	8	17	8	6	8	8	8	
10	0	8	13	0	3	9	9	9	
14	0	12	17	17	3	14	14	14	
49	100	51	44	58	38	54	54	54	
47	0	51	40	67	35	54	54	54	

PCT MBRS RESP *YES*- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOPC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	3	5	7	9	5	5
	ALL	SKL	SKL	SKL	US	O's
	SPC	SPC	SPC	SPC	SPC	SPC
	018	019	020	021	022	027 028
0 243 3 FILTER CIRCUITS - CLEAN	39	0	46	29	17	26 50
0 244 3 FILTER CIRCUITS - ALIGN OR ADJUST	34	0	36	30	17	26 39
0 245 3 FILTER CIRCUITS - TROUBLESHOOT TO	40	0	43	36	25	32 46
0 246 3 FILTER CIRCUITS - TROUBLESHOOT TO COMPONENT PARTS OF	43	0	45	39	25	29 48
0 247 3 FILTER CIRCUITS - WORK WITH LOW PASS FILTERS	44	0	45	42	50	32 47
0 248 3 FILTER CIRCUITS - WORK WITH HIGH PASS FILTERS	43	0	44	41	50	29 47
0 249 3 FILTER CIRCUITS - WORK WITH BANDPASS FILTERS	44	0	46	41	50	38 48
0 250 3 FILTER CIRCUITS - WORK WITH BAND-REJECT FILTERS	34	0	36	30	50	24 38
0 251 3 FILTER CIRCUITS - DON'T REMEMBER WHICH TYPE OF	12	100	15	7	0	6 16
0 252 3 FILTER CIRCUITS - WORK WITH L-SECTION	39	0	38	40	50	21 42
0 253 3 FILTER CIRCUITS - WORK WITH T-SECTION	38	0	37	40	50	24 39
0 254 3 FILTER CIRCUITS - WORK WITH PI-SECTION	36	0	33	42	50	26 34
0 255 3 FILTER CIRCUITS - WORK WITH YTTRIUM IRON GARNET (YIG) FILTERS	9	0	9	9	8	9 9
0 256 3 FILTER CIRCUITS - USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC FILTERS	9	0	9	10	8	3 10
E 257 1 COUPLING DEVICES OR CIRCUITRY - WORK WITH	52	0	54	48	58	41 57
E 258 1 COUPLING DEVICES CIRCUITRY - IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY COMPONENTS ASSOCIATED WITH RC COUPLING	52	0	53	49	58	41 56
E 259 1 COUPLING DEVICES OR CIRCUITRY - IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY AND COMPONENTS ASSOCIATED WITH IMPEDANCE COUPLING	49	0	51	47	58	29 55
E 260 1 COUPLING DEVICES OR CIRCUITRY - IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH TRANSFORMER COUPLING	49	0	50	47	58	38 53
E 261 1 COUPLING DEVICES OR CIRCUITRY - TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM THE RC COUPLING	48	0	51	44	42	38 54
E 262 1 COUPLING DEVICES OR CIRCUITRY - TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING	45	0	48	42	42	26 52
E 263 1 COUPLING DEVICES OR CIRCUITRY - TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING	47	0	49	44	42	35 52
E 264 1 COUPLING DEVICES OR CIRCUITRY - WORK WITH DIRECT COUPLED CIRCUITS	47	0	48	47	50	35 51
E 265 1 COUPLING DEVICES OR CIRCUITRY - WORK WITH CAPACITIVE-RESISTANCE COUPLED CIRCUITS	46	0	46	46	50	35 49
E 266 1 COUPLING DEVICES OR CIRCUITRY - WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS	43	0	43	45	50	29 45
E 267 1 COUPLING DEVICES OR CIRCUITRY - WORK WITH TRANSFORMER COUPLED CIRCUITS	48	0	48	46	50	38 50
E 268 2 SOLDERING - PERFORM, INSPECT OR EVALUATE CONNECTIONS	62	100	65	57	67	58 65
E 269 2 SOLDERING - SOLDER CONNECTIONS	59	0	67	47	33	58 67
E 270 2 SOLDERING - DESOLDER CONNECTIONS	59	0	64	48	33	65 66
E 271 2 SOLDERING - PERFORM HIGH RELIABILITY	37	0	39	34	25	32 41
E 272 2 SOLDERING - INSPECT CONNECTIONS	64	0	67	60	92	66 67
E 273 2 SOLDERING - CLEAN OR TIN CONNECTIONS	58	0	65	48	33	62 66

OCCUPATIONAL ANALYSIS PROGRAM USAFOPC (ATC) RANDOLPH AFB TX

PCT MBRS RESP 'YES'- 303X3 DAFSC/CONUS/OS GRPS

TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

DY-TSK

E 274 2 SOLDERING - MAKE HARDWIRE CONNECTIONS
E 275 2 SOLDERING - MAKE PRINTED CIRCUIT BOARD CONNECTIONS
E 276 2 SOLDERING - SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS
OR CAPACITORS
E 277 2 SOLDERING - SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE
DIODES OR TRANSISTORS
E 278 2 SOLDERING - PERFORM WIRE WRAPPING IN LIEU OF
E 279 2 SOLDERING - PERFORM CRIMPING IN LIEU OF
E 280 2 SOLDERING - PERFORM WIRE CONNECTIONS USING A 714 PUNCH-ON
TOOL IN LIEU OF

ALL	3	5	7	9	5	5	5
SKL	SKL	SKL	SKL	SKL	SKL	SKL	SKL
SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC
018	019	020	021	022	022	027	028
59	0	66	47	33	62	67	
49	0	52	44	25	50	53	
59	0	65	48	33	62	67	
53	0	57	47	25	53	59	
19	0	21	17	8	18	21	
44	0	49	37	33	53	48	
5	0	5	4	0	9	4	
61	100	67	52	75	68	67	RELAYS
33	0	37	27	25	29	39	
50	0	57	38	33	53	58	
57	0	63	47	75	65	63	
53	0	59	45	42	59	59	
19	0	20	18	17	9	22	
56	0	63	46	25	62	63	
43	0	49	34	33	41	51	
12	0	14	8	8	3	16	
20	0	22	17	17	9	25	
24	0	28	17	24	21	29	
28	0	33	18	25	24	35	
52	0	56	47	75	53	57	
51	0	55	45	75	53	56	
50	0	53	45	75	53	54	
49	0	53	44	75	53	53	
50	0	52	47	75	47	53	
51	0	55	46	50	56	55	
25	0	27	22	42	29	27	MICROPHONES AND SENSING DEVICE
16	0	14	17	33	15	14	
11	0	10	13	8	12	10	
23	0	25	21	8	26	26	
16	0	16	14	17	21	16	
6	0	6	7	8	6	6	
16	0	15	17	8	21	14	
5	0	4	6	8	6	4	
13	0	13	13	8	21	12	
5	0	4	6	0	12	2	
6	0	4	8	0	6	4	

E 281 3 RELAYS - WORK WITH
E 282 3 RELAYS - ADJUST
E 283 3 RELAYS - CLEAN
E 284 3 RELAYS - INSPECT
E 285 3 RELAYS - TROUBLESHOOT
E 286 3 RELAYS - MONITOR BIAS OUTPUT
E 287 3 RELAYS - REMOVE OR REPLACE
E 288 3 RELAYS - PERFORM TASKS ON CONTACTS
E 289 3 RELAYS - PERFORM TASKS ON CORES
E 290 3 RELAYS - PERFORM TASKS ON COILS
E 291 3 RELAYS - PERFORM TASKS ARMATURES
E 292 3 RELAYS - PERFORM ON SPRINGS
E 293 3 RELAYS - USE OR REFER TO SCHEMATIC SYMBOLS FOR SINGLE
POLE, SINGLE THROW (SPST), NORMALLY OPEN (NO)
E 294 3 RELAYS - USE OR REFER TO SCHEMATIC SYMBOLS FOR SINGLE
POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC)
E 295 3 RELAYS - USE OR REFER TO SCHEMATIC SYMBOLS FOR SINGLE
POLE, DOUBLE THROW (SPDT)
E 296 3 RELAYS - USE OR REFER TO SCHEMATIC SYMBOLS FOR DOUBLE
POLE, DOUBLE THROW (DPDT)
E 297 3 RELAYS - USE OR REFER TO SCHEMATIC SYMBOLS FOR OTHER
RELAY SYMBOLS
E 298 3 RELAYS - CHECK ELECTRICAL CONTINUITY OF COILS BY
MEASURING RESISTANCE
E 299 1 MICROPHONES - PERFORM TASKS DEALING WITH MICROPHONES OR
OTHER SENSING DEVICES SUCH AS TRANSDUCERS
F 300 1 MICROPHONES - INSPECT
F 301 1 MICROPHONES - CLEAN
F 302 1 MICROPHONES - OPERATE
F 303 1 MICROPHONES - TROUBLESHOOT AS FAR AS CHECKING WIRE
CONNECTIONS BUT NOT DOWN TO PARTS
F 304 1 MICROPHONES - TROUBLESHOOT DOWN TO PARTS
F 305 1 MICROPHONES - REMOVE OR REPLACE
F 306 1 MICROPHONES - REMOVE OR REPLACE PARTS
F 307 1 MICROPHONES - PERFORM TASKS ON CARBON
F 308 1 MICROPHONES - PERFORM TASKS ON CAPACITOR
F 309 1 MICROPHONES - PERFORM TASKS ON CRYSTAL

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

PCT MORS RESP *YES*- 303X3 DAFSC/CONUS/OS GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

ALL	3	5	7	9	5	5	5
SKL	SKL	SKL	SKL	SKL	US	0's	
SPC	SPC	SPC	SPC	SPC	SPC	SPC	
018	019	020	021	022	027	028	
F 310 1 MICROPHONE - PERFORM TASKS ON DYNAMIC	11	0	12	11	17	24	10
F 311 1 MICROPHONE - PERFORM TASKS ON VELOCITY PIBBON	3	0	2	4	0	9	1
F 312 1 MICROPHONE - PERFORM TASKS ON TRANSDUCERS	5	0	4	7	17	6	3
F 313 2 SPEAKERS - PERFORM TASKS DEALING WITH	27	0	24	19	25	24	25
F 314 2 SPEAKERS - INSPECT	18	0	16	21	25	17	17
F 315 2 SPEAKERS - CLEAN	14	0	13	16	0	6	14
F 316 2 SPEAKERS - OPERATE	24	0	25	22	8	24	26
F 317 2 SPEAKERS - TROUBLESHOOT AS FAR AS CHECKING WIRE	20	0	19	21	8	21	10
CONNECTIONS BUT NOT DOWN TO PARTS							
F 318 2 SPEAKERS - TROUBLESHOOT DOWN TO PARTS	5	0	7	3	0	3	7
F 319 2 SPEAKERS - REMOVE OR REPLACE COMPLETE	19	0	18	22	0	21	18
F 320 2 SPEAKERS - REMOVE OR REPLACE PARTS	4	0	4	4	0	3	4
F 321 2 SPEAKERS - PERFORM TASKS ON CONES	3	0	4	2	0	0	4
F 322 2 SPEAKERS - PERFORM TASKS ON SPIDERS	1	0	1	2	0	0	1
F 323 2 SPEAKERS - PERFORM TASKS ON FIELD COILS	3	0	3	2	0	0	3
F 324 2 SPEAKERS - PERFORM TASKS ON VOICE COILS	3	0	3	2	0	0	3
F 325 2 SPEAKERS - PERFORM TASKS ON PERMANENT MAGNETS	3	0	3	2	0	0	3
F 326 2 SPEAKERS - PERFORM TASKS ON ELECTROMAGNETS	2	0	2	2	0	0	2
F 327 2 SPEAKERS - PERFORM TASKS ON SOFT IRON CORES	2	0	2	2	0	0	2
F 328 3 OSCILLOSCOPES - USE	64	100	72	50	58	76	71
F 329 3 OSCILLOSCOPES - USE TO PERFORM OPERATIONAL CHECKS	61	0	69	48	58	76	68
F 330 3 OSCILLOSCOPES - USE TO PERFORM ALIGNMENTS OR ADJUSTMENTS	59	0	67	47	42	74	66
F 331 3 OSCILLOSCOPES - USE TO TROUBLESHOOT ELECTRONIC CIRCUITS	57	0	64	46	42	62	64
F 332 3 OSCILLOSCOPES - USE TO MEASURE FREQUENCY	60	0	68	47	50	74	67
F 333 3 OSCILLOSCOPES - USE TO MEASURE TIME	61	0	68	49	67	71	68
F 334 3 OSCILLOSCOPES - USE TO OBSERVE LISSAJOUS PATTERNS	37	100	39	32	42	35	39
F 335 3 OSCILLOSCOPES - USE TO OBSERVE SIGNALS WHILE UTILIZING	60	100	68	48	67	71	67
ATTENUATOR PROBES							
F 336 3 OSCILLOSCOPES - USE TO MAKE FREQUENCY OR TIME MEASURE-	48	0	51	44	52	47	51
MENTS USING DELAY TIME MULTIPLIERS							
F 337 3 OSCILLOSCOPES - USE TO MEASURE AC VOLTAGE	59	0	66	49	67	68	66
F 338 3 OSCILLOSCOPES - USE TO MEASURE OR OBSERVE SIGNALS AFTER	47	100	49	42	58	53	48
FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS							
F 339 3 OSCILLOSCOPES - USE TO MEASURE DC VOLTAGE	60	100	60	47	67	68	69
F 340 3 OSCILLOSCOPES - USE TO OBSERVE DATA PATTERNS	43	0	46	39	67	50	45
F 341 3 OSCILLOSCOPES - USE TO MEASURE RIPPLE VOLTAGE	51	0	54	45	67	59	58
F 342 3 OSCILLOSCOPES - USE TO MEASURE PHASE JITTER	36	0	41	29	58	47	40
F 343 3 OSCILLOSCOPES - USE TO DISPLAY SWEEP GENERATOR PATTERNS	52	100	57	43	58	59	57
F 344 3 OSCILLOSCOPES - USE TO OBSERVE PHASE RELATIONSHIPS	56	0	62	46	67	65	62
F 345 3 OSCILLOSCOPES - USE TO OBSERVE SAMPLING DISPLAYS	41	0	45	34	58	35	47
G 346 1 SEMICONDUCTOR DIODES - WORK WITH	56	0	59	52	67	41	63
G 347 1 SEMICONDUCTOR DIODES - INSPECT	53	0	56	47	67	41	60
G 348 1 SEMICONDUCTOR DIODES - CHECK	51	0	55	45	42	35	59
G 349 1 SEMICONDUCTOR DIODES - USE ENERGY LEVEL DIAGRAMS	6	0	5	7	8	9	4
G 350 1 SEMICONDUCTOR DIODE - USE PN JUNCTION CHARACTERISTIC	11	0	11	10	0	6	13
CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS							
VOLTAGE, TO COMPUTE FORWARD OR REVERSE BIAS RESISTANCE							

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

PCT M8RS RESP *YES*- 333X3 DAFSC/CONUS/OS GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	ALL	3	5	7	9	5	5
	SKL	SKL	SKL	SKL	SKL	US	O's
	SPC	SPC	SPC	SPC	SPC	SPC	SPC
	Q18	Q19	Q20	Q21	Q22	Q27	Q28
6 351 1 SEMICONDUCTOR DIODES - COMPUTE FORWARD OR REVERSE BIAS RESISTANCE	16	0	17	15	17	15	1
6 352 1 SEMICONDUCTOR DIODES - USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT OPERATION OF	38	0	41	34	67	26	44
6 353 1 SEMICONDUCTOR DIODES - IDENTIFY AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON THEIR PHYSICAL APPEARANCE	47	0	47	46	67	38	50
6 354 1 SEMICONDUCTOR DIODES - REFER TO OR DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW	9	0	8	11	8	9	7
6 355 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF MEASUREMENTS OF FORWARD BIAS RESISTANCE TO PERFORM JOB	41	0	39	43	58	29	41
6 356 1 SEMICONDUCTOR DIODE - NEED AN UNDERSTANDING OF DIODE COLOR CODING TO PERFORM JOB	23	0	26	19	58	21	27
6 357 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF DIODE NUMBERING SYSTEM TO PERFORM JOB	38	0	38	38	58	35	39
6 358 1 SEMICONDUCTOR DIODE - NEED AN UNDERSTANDING OF MEASUREMENTS OF REVERSE BIAS RESISTANCE TO PERFORM JOB	40	0	39	41	58	29	42
6 359 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF VALENCE ELECTRONS (THOSE IN THE OUTERMOST SHELL) TO PERFORM JOB	9	0	9	7	8	6	10
6 360 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF SYMBOLS ON THE DIODE WHICH INDICATE THE CATHODE END TO PERFORM JOB	52	0	54	48	67	38	57
6 361 1 SEMICONDUCTOR DIODE - NEED AN UNDERSTANDING OF DIRECTION OF CURRENT FLOW THROUGH A DIODE TO PERFORM JOB	52	0	54	48	67	38	57
6 362 1 SEMICONDUCTOR DIODE - NEED TO KNOW MATERIALS USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON	15	0	13	19	17	9	14
6 363 1 SEMICONDUCTOR DIODES - NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OF RESISTANCE	23	0	24	22	50	21	25
6 364 1 SEMICONDUCTOR DIODES - USE OR REFER TO PN JUNCTION DIODE CHARACTERISTICS CURVES	9	0	8	10	0	3	9
6 365 1 SEMICONDUCTOR DIODES - DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED FROM CIRCUIT DIAGRAM	38	0	36	42	50	29	38
6 366 1 SEMICONDUCTOR DIODES - NEED UNDERSTANDING OF VALENCE BAND	10	0	10	9	17	6	11
6 367 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF FORBIDDEN BAND	9	0	8	10	8	3	9
6 368 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF CONDUCTION BAND	9	0	9	11	8	9	9
6 369 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF COVALENT BONDING	9	0	9	9	8	6	9
6 370 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF ELECTRON-HOLE PAIR CREATED	11	0	17	11	8	6	13
6 371 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF ELECTRON FLOW OR HOLE FLOW	18	0	17	21	25	12	18
6 372 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF DONOR IMPURITY	9	0	9	11	9	3	10
6 373 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF ACCEPTOR IMPURITY	9	0	9	11	8	3	9

PCT MBRS RESP *YES* - 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

OY-TSK

	ALL	3	5	7	9	5	5	5
	SKL	SKL	SKL	SKL	SKL	US	O's	
	SPC	SPC	SPC	SPC	SPC			
	018	019	020	021	022	027	028	
G 374 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF P-TYPE MATERIAL	24	0	23	26	33	21	23	
G 375 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF N-TYPE MATERIAL	24	0	23	26	33	21	23	
G 376 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF MAJORITY CARRIERS	13	0	12	13	8	3	14	
G 377 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF MINORITY CARRIERS	12	0	12	13	8	3	14	
G 378 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF JUNCTION RECOMBINATION	9	0	8	11	8	3	9	
G 379 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF DEPLETION REGION	13	0	12	14	8	9	13	
G 380 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL	13	0	13	13	8	12	13	
G 381 1 SEMICONDUCTOR DIODES - USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO	49	0	48	50	67	32	52	
G 382 1 SEMICONDUCTOR DIODES - USE OR REFER TO BARRIER HEIGHT	8	0	7	9	0	0	8	
G 383 1 SEMICONDUCTOR DIODES - USE OR REFER TO DIODE SUBSTITUTION INFORMATION	36	0	33	41	58	24	35	
G 384 1 SEMICONDUCTOR DIODES - USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT	26	0	24	29	25	15	26	
G 385 1 SEMICONDUCTOR DIODES - USE OR REFER TO PEAK RECURRENT FORWARD CURRENT	19	0	17	22	25	12	19	
G 386 1 SEMICONDUCTOR DIODES - USE OR REFER TO MAXIMUM SURGE CURRENT	22	0	19	27	33	15	21	
G 387 1 SEMICONDUCTOR DIODES - USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE	28	0	26	32	33	16	27	
G 388 2 TRANSISTORS - WORK WITH	45	100	42	49	58	44	42	TRANSISTORS
G 389 2 TRANSISTORS - INSPECT	41	0	41	43	58	44	40	
G 390 2 TRANSISTORS - CHECK	40	100	39	40	33	41	39	
G 391 2 TRANSISTORS - NEED AN UNDERSTANDING OF EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	37	0	35	41	50	35	36	
G 392 2 TRANSISTORS - USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	38	0	34	45	58	35	34	
G 393 2 TRANSISTORS - USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS	37	0	33	44	58	35	33	
G 394 2 TRANSISTORS - USE OR REFER HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION	18	0	17	19	17	17	18	
G 395 2 TRANSISTOR - USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION	17	0	17	17	17	12	18	
G 396 2 TRANSISTOR - USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE, AND EMITTER)	22	0	22	23	17	10	22	
G 397 2 TRANSISTOR - USE OR REFER TO LEAKAGE CURRENT (ICBO)	15	0	12	20	13	12	12	
G 398 2 TRANSISTOR - USE OR REFER TO SCHEMATIC SYMBOLS	44	0	42	47	58	41	42	
G 399 2 TRANSISTOR - USE OR REFER TO TRANSISTOR NOTATION SUCH AS 01, 42, 43, ETC	42	0	30	46	58	38	40	
G 400 2 TRANSISTOR - USE OR REFER TO SUBSTITUTION INFORMATION	38	0	34	43	50	41	33	

PCT MBR5 RESP 'YES' - 333X3 DAFSC/CONUS/OS GPPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

ALL	SKL	SPC	US	SKL	SPC	US	SKL	SPC	US	SKL	SPC	US
018	019	020	021	022	023	024	025	026	027	028	029	030

G 401 2 TRANSISTOR - USE OR REFER TO THE GENERAL RULE THAT THE BASE CURRENT IB IS NORMALLY SIGNIFICANTLY SMALLER THAN THE EMITTER CURRENT

G 402 2 TRANSISTOR - USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR

G 403 2 TRANSISTOR - USE THE GENERAL RULE THAT LEAKAGE CURRENT (ICBO) INCREASES AS TEMPERATURE INCREASES

G 404 2 TRANSISTOR - USE OR REFER TO CHARACTERISTIC CURVES OF

G 405 2 TRANSISTOR - USE OR REFER TO BETA

G 406 2 TRANSISTOR - USE OR REFER TO ALPHA

G 407 2 TRANSISTOR - USE OR REFER TO GAMMA

G 408 2 TRANSISTOR - USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE BASE - EMITTER VOLTAGE INTO THE BASE COLLECTOR VOLTAGE ($AV = V_{CB}/V_{BE}$)

G 409 2 TRANSISTOR - USE OR REFER TO THE CURRENT GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT ($AI = IC/IB$)

G 410 2 TRANSISTORS - USE OR REFER TO THE POWER GAIN FOR SPECIFIC TRANSISTORS BY MULTIPLYING THE CURRENT GAIN TIMES THE VOLTAGE GAIN ($AP = AI \times AV$)

G 411 2 TRANSISTORS - PERFORM MATCHING THROUGH THE USE OF CURVE TRACING

G 412 3 TRANSISTOR AMPLIFIERS - WORK WITH

G 413 3 TRANSISTOR AMPLIFIERS - INSPECT

G 414 3 TRANSISTOR AMPLIFIERS - ALIGN OP ADJUST

G 415 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT TO THE CIRCUIT LEVEL

G 416 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT TO COMPONENTS

G 417 3 TRANSISTOR AMPLIFIERS - REMOVE OR REPLACE COMPLETE AMPLIFIER

G 418 3 TRANSISTOR AMPLIFIERS - REMOVE OR REPLACE CIRCUIT COMPONENTS

G 419 3 TRANSISTOR AMPLIFIERS - USE OR REFER TO CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM CHANGE IN BASE CURRENT

G 420 3 TRANSISTOR AMPLIFIERS - USE OR REFER TO THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A SPECIFIC CHANGE IN BASE CURRENT

G 421 3 TRANSISTOR AMPLIFIERS - USE OR REFER TO THE CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A CHANGE IN BASE CURRENT

G 422 3 TRANSISTOR AMPLIFIERS - USE OR REFER TO THE CHANGE IN CURRENT WHICH RESULTS FROM AN INPUT SIGNAL

G 423 3 TRANSISTOR AMPLIFIERS - USE OR REFER TO THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL

TRANSISTOR AMPLIFIERS

SKL	SPC	US	SKL	SPC	US	SKL	SPC	US	SKL	SPC	US	SKL	SPC	US
35	100	32	40	58	26	34	26	31	37	58	26	31	37	58
33	0	30	37	58	26	34	26	31	37	58	26	31	37	58
28	0	26	32	17	21	27	33	37	25	26	32	32	31	37
32	0	31	37	25	26	32	32	31	37	25	26	32	31	37
30	0	29	33	17	24	29	31	0	29	33	17	24	31	0
16	0	15	17	17	6	17	9	0	7	12	8	3	7	0
16	0	15	18	17	6	17	17	0	15	18	17	6	17	0
17	0	16	18	17	9	17	8	0	7	9	8	3	7	0
8	0	7	9	8	3	7	16	0	15	18	17	6	17	0

PCT MARS RESP 'YES'- 303X3 DAFSC/CONUS/OS GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK	3	5	7	9	5	5	5	5	5
ALL	SKL	SKL	SKL	SKL	US	0's	SPC	SPC	SPC
018	019	020	021	022	027	028	028	027	028
G 424 3 TRANSISTOR AMPLIFIERS - USE THE LOAD- LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (REQUIRES PLOTTING A LOAD-LINE ON A TRANSISTOR CHARACTERISTIC CURVE)	6	0	5	7	8	2	6		
G 425 3 TRANSISTOR AMPLIFIERS - USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR	15	0	13	17	0	12	13		
G 426 3 TRANSISTOR AMPLIFIERS - MEASURE VOLTAGE GAIN	24	0	24	25	25	24	24		
G 427 3 TRANSISTOR AMPLIFIERS - MEASURE CURRENT GAIN	17	0	17	17	17	12	18		
G 428 3 TRANSISTOR AMPLIFIERS - MEASURE POWER GAIN	18	0	17	19	17	12	19		
G 429 3 TRANSISTOR AMPLIFIERS - USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE - EMITTER VOLTAGE INTO THE CHANGE OF THE BASE COLLECTOR VOLTAGE	10	0	8	14	8	0	10		
G 430 3 TRANSISTOR AMPLIFIERS - IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH EMITTER (SWAMPING) RESISTOR STABILIZATION	16	0	13	22	17	12	13		
G 431 3 TRANSISTOR AMPLIFIERS - IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH SELF-BIAS STABILIZATION	18	0	16	22	17	9	17		
G 432 3 TRANSISTOR AMPLIFIERS - IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH SELF-BIAS THERMISTOR STABILIZATION	16	0	15	17	17	12	16		
G 433 3 TRANSISTOR AMPLIFIERS - IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH FORWARD BIAS DIODE STABILIZATION	16	0	13	20	8	12	18		
G 434 3 TRANSISTOR AMPLIFIERS - IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH REVERSE BIAS DIODE STABILIZATION	16	0	13	20	6	12	14		
G 435 3 TRANSISTOR AMPLIFIERS - IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH DOUBLE DIODE STABILIZATION	14	0	12	17	8	12	12		
G 436 3 TRANSISTOR AMPLIFIERS - IDENTIFY OR TROUBLESHOOT AMPLITUDE DISTORTION	21	0	19	23	42	18	20		
G 437 3 TRANSISTOR AMPLIFIERS - IDENTIFY FREQUENCY DISTORTION	18	0	19	17	33	18	19		
G 438 3 TRANSISTOR AMPLIFIERS - IDENTIFY PHASE DISTORTION	17	0	17	17	33	18	17		
G 439 3 TRANSISTOR AMPLIFIERS - NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE	13	100	11	15	17	9	11		
G 440 3 TRANSISTOR AMPLIFIERS - DETERMINE THE CLASS OF OPERATION IN ORDER TO TROUBLESHOOT CIRCUITS	14	0	11	18	8	3	13		
G 441 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR PARAPHASE	17	0	15	22	6	18	14		
G 442 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR PUSH-PULL	27	0	27	29	25	21	27		
G 443 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS	15	0	12	19	10	15	12		
G 444 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED	15	0	12	21	25	12	12		
G 445 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR CASCADE-CONNECTED	19	0	16	24	17	18	16		

PCT MBRS RESP 'YES' - 303X3 DAFSC/CONUS/O5 GPPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSM

	ALL	3	5	7	9	5	5
	SKL	SKL	SKL	SKL	SKL	US	O's
	SPC	SPC	SPC	SPC	SPC	SPC	SPC
	018	019	020	021	022	027	028
6 446 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR VOLTAGE MULTIPLIERS (DOUBLERS/TRIPLERS)	25	0	24	26	26	15	26
6 447 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR RF	30	0	29	31	25	24	31
6 448 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR WIDEBAND (VIDEO)	29	0	28	32	25	24	29
6 449 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR AUDIO	19	0	15	24	8	12	16
6 450 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR PUSH-PULL OR POWER	29	0	28	32	17	26	29
6 451 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR PARAPHASE	17	0	15	20	17	18	15
6 452 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY	15	0	12	20	25	15	11
6 453 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR IF	33	0	32	34	25	29	33
6 454 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR DIFFERENTIATING (DIFF)	28	0	28	27	25	21	30
6 455 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR OPERATIONAL (OP)	27	0	25	31	25	26	24
6 456 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR INTERGRATING	28	0	27	30	25	18	29
6 457 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR SUMMING	27	0	24	29	17	21	27
M 458 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO VARIATORS/VARICAPS	34	0	33	35	50	32	34
M 459 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO TUNNEL DIODES	26	0	24	31	50	24	24
M 460 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO FIELD EFFECT TRANSISTORS (FET)	36	0	31	46	50	29	31
M 461 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO UNJUNCTION TRANSISTORS	31	0	25	42	42	21	26
M 462 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO ZENER DIODES	53	0	54	51	58	56	54
M 463 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO INTEGRATED CIRCUITS	49	0	46	54	67	47	47
M 464 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO PIN DIODES	19	0	16	23	25	24	16
M 465 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO LEDs/LCDS	38	0	34	38	50	44	38
M 466 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO FANTAIL TRANSISTORS	8	0	6	10	0	6	6
M 467 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO SILICON CONTROL RECTIFIERS (SCRS)	45	0	41	52	54	35	42
M 468 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO TRIACS	12	0	10	17	25	12	9
M 469 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO PROGRAMMABLE UNJUNCTION TRANSISTOR (PUT)	7	0	6	9	17	6	6
M 470 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO SILICON CONTROLLED SWITCH (SCS)	10	0	7	17	25	3	7
M 471 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO SILICON UNILATERAL SWITCH (SUS)	6	0	5	8	4	3	5

SOLID-STATE SPECIAL PURPOSE DEVICES

PCT MBRs RESP 'YES'-- 303X3 DAFSC/CUNUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFONC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	ALL	3	5	7	9	5	5	5
	SKL	SKL	SKL	SKL	SKL	US	O's	
H 472 2 POWER SUPPLIES - WORK WITH	60	100	67	49	67	76	65	POWER SUPPLIES
H 473 2 POWER SUPPLIES - INSPECT	60	100	67	49	75	71	67	
H 474 2 POWER SUPPLIES - CLEAN	57	0	66	42	33	62	67	
H 475 2 POWER SUPPLIES - ALIGN OR ADJUST	60	100	68	47	25	71	67	
H 476 2 POWER SUPPLIES - TROUBLESHOOT TO CIRCUIT LEVEL	57	0	64	45	25	62	65	
H 477 2 POWER SUPPLIES - TROUBLESHOOT TO COMPONENTS	55	0	62	44	33	59	63	
H 478 2 POWER SUPPLIES - REMOVE OR REPLACE COMPLETE UNIT	58	0	65	47	25	71	64	
H 479 2 POWER SUPPLIES - REMOVE OR REPLACE COMPONENTS	55	0	62	44	25	59	63	
H 480 2 POWER SUPPLIES - INSPECT OR SERVICE COOLANT LEVELS	21	0	24	16	50	18	26	
H 481 2 POWER SUPPLIES - WORK WITH HALF-WAVE RECTIFIERS	53	0	56	48	67	47	59	
H 482 2 POWER SUPPLIES - RECTIFIERS - WORK WITH FULL WAVE OTHER THAN BRIDGE	54	0	56	50	75	53	57	
H 483 2 POWER SUPPLIES - RECTIFIERS - WORK WITH BRIDGE	57	0	62	48	67	59	63	
H 484 2 POWER SUPPLIES - RECTIFIERS - WORK WITH THREE PHASE	43	0	46	39	58	50	45	
H 485 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO INPUT VOLTAGE	61	0	67	53	75	68	67	
H 486 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO INPUT FREQUENCY	53	0	57	47	58	56	58	
H 487 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO PEAK OUTPUT VOLTAGE	54	0	59	47	75	62	59	
H 488 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO AVERAGE OUTPUT VOLTAGE	54	0	59	47	75	68	57	
H 489 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO RIPPLE AMPLITUDE	48	0	51	43	67	59	49	
H 490 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO RIPPLE FREQUENCY	46	0	48	43	50	53	47	
H 491 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE	36	0	36	37	58	29	38	
H 492 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS	53	0	58	44	58	56	59	
H 493 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO EFFECTIVE OUTPUT VOLTAGE	48	0	51	43	75	53	51	
H 494 2 POWER SUPPLIES - FILTERS - WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS	56	0	61	49	67	53	63	
H 495 2 POWER SUPPLIES - FILTERS - WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS	52	0	55	48	67	50	56	
H 496 2 POWER SUPPLIES - FILTERS - WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS	44	0	43	46	67	50	45	
H 497 2 POWER SUPPLIES - FILTERS - WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS	42	0	42	42	67	50	44	
H 498 2 POWER SUPPLIES - FILTERS - WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS	40	0	42	44	67	40	42	
H 499 2 POWER SUPPLIES - FILTERS - WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS	42	0	42	42	67	50	42	
H 500 2 POWER SUPPLIES - FILTERS - HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE	5	0	0	7	0	6	9	
H 501 2 POWER SUPPLIES - WORK WITH REGULATOR CIRCUITS	56	0	59	50	67	53	61	

PCT M8RS RESP *YES*- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	ALL	3	5	7	9	5	5	5
	SPC	SPC	SKL	SPC	SKL	US	SPC	O's
	018	C19	C20	021	022	027	028	
M 502 3 OSCILLATORS - WORK WITH	50	0	55	43	67	47	57	OSCILLATORS
M 503 3 OSCILLATORS - INSPECT	47	0	52	39	67	50	52	
M 504 3 OSCILLATORS - ALIGN OR ADJUST	47	0	50	42	25	47	51	
M 505 3 OSCILLATORS - REMOVE OR REPLACE	46	0	50	38	25	47	51	
M 506 3 OSCILLATORS - REMOVE OR REPLACE COMPONENTS	40	0	41	38	25	32	43	
M 507 3 OSCILLATORS - TROUBLESHOOT TO CIRCUIT LEVEL	47	0	50	42	33	47	51	
M 508 3 OSCILLATORS - TROUBLESHOOT TO COMPONENTS	42	0	45	38	33	35	47	
M 509 3 OSCILLATORS - USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)	45	0	49	39	58	44	51	
M 510 3 OSCILLATORS - USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)	41	0	43	38	58	38	44	
M 511 3 OSCILLATORS - USE OR REFER TO AMPLITUDE STABILITY	37	0	39	34	50	32	41	
M 512 3 OSCILLATORS - USE OR REFER TO FREQUENCY STABILITY	43	0	44	42	58	41	49	
M 513 3 OSCILLATORS - USE OR REFER TO PIEZOELECTRIC EFFECT (CRYSTAL OSCILLATIONS)	26	0	26	26	42	15	28	
M 514 3 OSCILLATORS - USE OR REFER TO HARMONIC DISTORTION	28	0	30	24	42	21	32	
M 515 3 OSCILLATORS - FREQUENCY DETERMINING DEVICES (FDD) - WORK	32	0	33	30	58	18	36	
M 516 3 OSCILLATORS - FREQUENCY DETERMINING DEVICES (FDD) - WORK	42	0	44	41	67	29	47	
M 517 3 OSCILLATORS - WORK WITH OSCILLATORS WHICH CONTAIN CRYSTALS	44	0	46	42	58	38	48	
M 518 3 OSCILLATORS - WORK WITH OSCILLATORS WHICH CONTAIN PHASE LOCK LOOPS (PLL)	19	0	19	18	50	12	21	
M 519 3 OSCILLATORS - FREQUENCY DETERMINING DEVICES (FDD) - WORK	14	0	17	9	8	15	17	
M 520 3 OSCILLATORS - SINUSOIDAL - WORK WITH SERIES HARTLEY	24	0	24	23	42	15	27	
M 521 3 OSCILLATORS - SINUSOIDAL - WORK WITH SHUNT HARTLEY	22	0	22	22	42	12	24	
M 522 3 OSCILLATORS - SINUSOIDAL - WORK WITH COLPITTS	19	0	17	21	50	6	21	
M 523 3 OSCILLATORS - SINUSOIDAL - WORK WITH CLAPP	12	0	11	13	33	0	14	
M 524 3 OSCILLATORS - SINUSOIDAL - WORK WITH VOLTAGE CONTROL	26	0	25	29	58	12	27	
M 525 3 OSCILLATORS - SINUSOIDAL - WORK WITH CRYSTAL	36	0	38	34	67	29	41	
M 526 3 OSCILLATORS - SINUSOIDAL - WORK WITH VOLTAGE CONTROL	23	0	22	27	58	15	24	
M 527 3 OSCILLATORS (VCOS)	12	0	11	14	33	0	14	
M 528 3 OSCILLATORS - SINUSOIDAL - DON'T KNOW WHICH TYPE OF OSCILLATOR	20	0	24	13	25	21	24	
M 529 3 OSCILLATORS - WORK WITH PULSE GENERATING CIRCUITS	45	0	47	42	67	38	49	
M 530 3 OSCILLATORS - WORK WITH BLOCKING OSCILLATORS	45	0	46	42	67	35	49	
M 531 3 OSCILLATORS - WORK WITH BURST GENERATORS	8	0	9	7	17	3	11	
M 532 3 OSCILLATORS - WORK WITH BLOCKED OSCILLATORS	11	0	10	12	47	18	33	
I 533 1 MULTIVIBRATORS - WORK WITH	48	0	49	47	67	47	49	MULTIVIBRATORS
I 534 1 MULTIVIBRATORS - INSPECT	44	0	46	41	67	41	47	
I 535 1 MULTIVIBRATORS - ALIGN OR ADJUST	44	0	45	42	25	35	47	
I 536 1 MULTIVIBRATORS - CALIBRATE	35	0	35	35	25	24	38	

PCT MBRS RESP 'YES' - 303X3 DAFSC/CONUS/OS GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING	3		5		7		9		5		5	
	ALL	SKL	SPC	SKL	SPC	SKL	SPC	SKL	SPC	SKL	SPC	O's
I 537 1 MULTIVIBRATORS - TROUBLESHOOT TO CIRCUIT	44	0	45	0	43	33	16	47				
I 538 1 MULTIVIBRATORS - TROUBLESHOOT TO CIRCUIT COMPONENTS	43	0	45	0	40	33	35	47				
I 539 1 MULTIVIBRATORS - REMOVE OR REPLACE COMPLETE CIRCUITS	41	0	42	0	40	25	38	43				
I 540 1 MULTIVIBRATORS - REMOVE OR REPLACE CIRCUIT COMPONENTS	41	0	43	0	38	25	35	45				
I 541 1 MULTIVIBRATORS - WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUITS	31	0	31	0	31	58	24	33				
I 542 1 MULTIVIBRATORS - WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORKS (FDD)	37	0	35	0	41	58	32	36				
I 543 1 MULTIVIBRATORS - WORK WITH MULTIVIBRATORS WITH CRYSTAL FREQUENCY DETERMINING DEVICES (FDD)	32	0	31	0	33	58	30	30				
I 544 1 MULTIVIBRATORS - FREQUENCY DETERMINING DEVICES (FDD) - DON'T KNOW WHICH TYPE OF FDD WORKED WITH	17	0	21	0	11	25	12	22				
I 545 1 MULTIVIBRATORS - WORK WITH ASTABLE (FREE RUNNING)	43	0	43	0	43	58	35	45				
I 546 1 MULTIVIBRATORS - WORK WITH MONOSTABLE (ONE SHOT)	45	0	44	0	46	67	38	46				
I 547 1 MULTIVIBRATORS - WORK WITH BISTABLE (FLIP FLOP)	43	0	43	0	43	67	38	46				
I 548 2 LIMITERS - CLAMPERS - WORK WITH	38	0	40	0	34	58	36	41				
I 549 2 LIMITERS - CLAMPERS - WORK WITH SERIES DIODE LIMITERS	34	0	36	0	32	50	29	38				
I 550 2 LIMITERS - CLAMPERS - WORK WITH SHUNT DIODE LIMITERS	34	0	35	0	32	58	25	37				
I 551 2 LIMITERS - CLAMPERS - WORK WITH LIMITERS WITH BIAS	30	0	31	0	28	42	21	33				
I 552 2 LIMITERS - CLAMPERS - WORK WITH ZENER DIODE LIMITERS	35	0	34	0	30	50	29	41				
I 553 2 LIMITERS - CLAMPERS - WORK WITH TRANSISTOR LIMITERS	27	0	22	0	25	50	21	23				
I 554 2 LIMITERS - CLAMPERS - WORK WITH TRIODE LIMITERS	21	0	21	0	21	33	16	21				
I 555 2 LIMITERS - CLAMPERS - WORK WITH BASIC DIODE CLAMPING CIRCUITS	34	0	35	0	32	58	29	37				
I 556 2 LIMITERS - CLAMPERS - WORK WITH BIAS DIODE CLAMPING CIRCUITS	26	0	26	0	27	50	21	27				
I 557 2 LIMITERS - CLAMPERS - WORK WITH DC RESISTORS (DCR)	19	0	18	0	22	50	9	20				
I 558 3 ELECTRON TUBES - WORK ON EQUIPMENT WHICH CONTAINS BASIC ELECTRON TUBES	46	0	50	0	40	67	44	51				
I 559 3 ELECTRON TUBES - CHECK CONDITION	46	0	51	0	38	50	41	53				
I 560 3 ELECTRON TUBES - USE TUBE TESTERS TO CHECK	45	0	51	0	35	50	44	52				
I 561 3 ELECTRON TUBES - USE MULTIMETERS TO CHECK	36	0	40	0	29	33	26	42				
I 562 3 ELECTRON TUBES - USE SCOPES TO CHECK	40	0	43	0	34	33	44	42				
I 563 3 ELECTRON TUBES - USE SUBSTITUTION TO CHECK	42	0	46	0	38	50	44	46				
I 564 3 ELECTRON TUBES - USE OR REFER TO CUTOFF RATING	36	0	39	0	31	50	29	41				
I 565 3 ELECTRON TUBES - USE OR REFER TO PEAK INVERSE VOLTAGE RATING	19	0	21	0	16	25	12	22				
I 566 3 ELECTRON TUBES - USE OR REFER TO PEAK CURRENT RATING	20	0	23	0	16	25	16	23				
I 567 3 ELECTRON TUBES - USE OR REFER TO TRANSIT TIME RATING	16	0	18	0	14	17	12	15				
I 568 3 ELECTRON TUBES - USE OR REFER TO PLATE DISSIPATION RATING	13	0	15	0	9	17	12	15				
I 569 3 ELECTRON TUBES - USE OR REFER TO SATURATION RATING	38	0	42	0	32	50	38	42				
I 570 3 ELECTRON TUBES - USE OR REFER TO DC PLATE RESISTANCE	25	0	27	0	22	26	24	27				
I 571 3 ELECTRON TUBES - USE OR REFER TO PLATE VOLTAGE	44	0	42	0	38	67	44	49				
I 572 3 ELECTRON TUBES - USE OR REFER TO PLATE CURRENT	40	0	44	0	33	58	44	43				
I 573 3 ELECTRON TUBES - USE OR REFER TO GRID VOLTAGE	43	0	47	0	37	67	41	47				
I 574 3 ELECTRON TUBES - USE OR REFER TO GRID CURRENT	37	0	41	0	30	58	38	41				

LIMITERS AND CLAMPERS

ELECTRON TUBES

PCT MBRS RESP 'YES' 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

I 575 3 ELECTRON TUBES - USE OR REFER TO CATHODE VOLTAGE
 I 576 3 ELECTRON TUBES - USE OR REFER TO CATHODE CURRENT
 I 577 3 ELECTRON TUBES - USE OR REFER TO FILAMENT VOLTAGE
 I 578 3 ELECTRON TUBES - USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR
 I 579 3 ELECTRON TUBES - USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC.) AMPLIFICATION FACTORS
 I 580 3 ELECTRON TUBES - USE OR REFER TO TRANSCONDUCTANCE
 I 581 3 ELECTRON TUBES - USE OR REFER TO THE PARAMETER CALLED AC PLATE RESISTANCE
 I 582 3 ELECTRON TUBES - USE OR REFER TO INTERELECTRODE CAPACITANCE
 I 583 3 ELECTRON TUBES - USE OR REFER TO CHARACTERISTIC CURVES
 I 584 3 ELECTRON TUBES - USE OR REFER TO PLATE VOLTAGE FOR A SPECIFIED BIAS
 I 585 3 ELECTRON TUBES - USE OR REFER TO PLATE CURRENT FOR A SPECIFIED BIAS
 I 586 3 ELECTRON TUBES - USE OR REFER TO BIAS REQUIRED FOR CUTOFF
 I 587 3 ELECTRON TUBES - USE OR REFER TO BIAS REQUIRED FOR SATURATION
 I 588 3 ELECTRON TUBES - USE OR REFER TO TO GAIN
 I 589 3 ELECTRON TUBES - USE OR REFER TO EFFICIENCY
 I 590 3 ELECTRON TUBES - USE MULTIMETERS TO DETERMINE TUBE AMPLIFIER GAIN
 I 591 3 ELECTRON TUBES - USE OSCILLOSCOPES TO DETERMINE TUBE AMPLIFIER GAIN
 I 592 3 ELECTRON TUBES - USE CHARACTERISTICS CURVES TO DETERMINE TUBE AMPLIFIER GAIN
 I 593 3 ELECTRON TUBES - USE OR REFER TO TUBE SOCKET NOTATION
 I 594 3 ELECTRON TUBES - USE OR REFER TO PIN NUMBERING SYSTEMS
 I 595 3 ELECTRON TUBES - USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS
 I 596 3 ELECTRON TUBES - USE OR REFER TO ELECTRON TUBE DIODES
 J 597 1 ELECTRON TUBE AMPLIFIERS OR CIRCUITS - WORK WITH
 J 598 1 ELECTRON TUBE AMPLIFIERS OR CIRCUITS - DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT CIRCUITS
 J 599 1 ELECTRON TUBE AMPLIFIERS OR CIRCUITS - TROUBLESHOOT OR OR REPAIR PARAPHASE AMPLIFIERS
 J 600 1 ELECTRON TUBE AMPLIFIERS OR CIRCUITS - TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS
 J 601 1 ELECTRON TUBE AMPLIFIERS OR CIRCUITS - TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS
 J 602 1 ELECTRON TUBE AMPLIFIERS OR CIRCUITS - TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS
 J 603 1 ELECTRON TUBE AMPLIFIERS OR CIRCUITS - DON'T KNOW WHICH TYPE OF AMPLIFIER WORKED ON

ALL	3	5	7	9	5	5	0's
SPC	SKL	SKL	SKL	SKL	US	SPC	SPC
019	019	020	021	022	027	028	
42	0	46	37	67	44	46	
36	0	47	31	54	41	39	
47	0	51	40	67	44	52	
19	0	19	19	8	12	20	
17	0	18	16	0	12	19	
8	0	7	10	0	3	7	
10	0	10	9	0	0	12	
17	0	16	17	0	9	17	
10	0	12	8	0	3	14	
28	0	31	25	8	24	32	
26	0	28	23	8	18	29	
34	0	37	28	42	35	38	
32	0	37	25	42	38	36	
35	0	38	30	50	38	38	
23	0	27	17	8	21	28	
29	0	31	27	42	24	32	
35	0	37	32	42	29	38	
11	0	12	10	8	6	13	
43	0	45	40	58	41	46	
46	0	49	40	54	44	50	
42	0	46	35	58	35	48	
19	0	41	16	67	38	41	
43	0	45	41	42	32	47	
16	0	15	19	8	9	16	
22	0	21	24	17	15	22	
32	0	32	32	25	18	35	
22	0	21	22	33	9	24	
23	0	19	28	25	12	21	
15	0	19	8	8	18	19	

ELECTRON TUBE AMPLIFIERS AND
CIRCUITS

PCT MBRS RESP *YES*- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

OY-TSK

	ALL	3	5	7	9	5	5	5	5
	SKL	SKL	SKL	SKL	SKL	SKL	SKL	SKL	SKL
	SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC
	018	019	020	021	022	023	024	025	026
J 604 2 SPECIAL PURPOSE ELECTRON TUBES - WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)	46	0	49	41	67	41	51	SPECIAL PURPOSE ELECTRON TUBES	
J 605 2 SPECIAL PURPOSE ELECTRON TUBES - WORK WITH CATHODE-RAY TUBES (CRTS)	64	100	67	57	75	62	69		
J 606 2 SPECIAL PURPOSE ELECTRON TUBES - WORK WITH BEAM POWER TUBES	21	0	19	22	58	26	19		
J 607 2 SPECIAL PURPOSE ELECTRON TUBES - WORK WITH THYRATONS	50	100	54	44	75	56	54		
J 608 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS	42	0	44	39	33	29	46		
J 609 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS	50	0	54	45	42	41	56		
J 610 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROSTATIC DEFLECTION SYSTEMS	47	0	50	42	33	38	53		
J 611 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO PHOSPHOR SCREENS	36	0	37	35	33	38	37		
J 612 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO AQUADAG COATINGS	39	0	37	41	33	47	36		
J 613 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO ELECTRON OPTICS	18	0	17	19	8	24	16		
J 614 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO PERSISTENCE	37	0	36	39	42	38	36		
J 615 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO DECAY TIMES	23	0	21	26	17	18	21		
J 616 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO FLOURESCENCE	28	0	28	27	25	21	29		
J 617 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO PHOSPHORESCENCE	32	0	32	32	33	32	32		
J 618 3 HETERODYNING AND MODULATION-DEMULATION (MODEMS) - WORK ON TRANSMIT OR RECEIVE SYSTEMS	54	100	55	51	42	50		HETERODYNING AND MODULATION-DE MODULATION (MODEMS)	
J 619 3 HETERODYNING AND MODULATION-DEMULATION (MODEMS) - PERFORM TASKS ON FREQUENCY CONVERTERS	39	0	38	40	42	29	41		
J 620 3 HETERODYNING AND MODULATION-DEMULATION (MODEMS) - PERFORM TASKS ON FREQUENCY MIXERS	49	0	50	48	42	41	52		
J 621 3 HETERODYNING AND MODULATION-DEMULATION (MODEMS) - PERFORM TASKS ON MODEMS	14	0	14	14	17	12	14		
J 622 3 HETERODYNING AND MODULATION-DEMULATION (MODEMS) - USE OR REFER TO THE HETERODYNING OF SIGNALS IN WORK WITH TRANSMIT OR RECEIVE SYSTEMS	56	0	39	32	33	36	39		
J 623 3 HETERODYNING AND MODULATION-DEMULATION (MODEMS) - PERFORM TASKS ON REACTANCE MODULATORS	17	0	16	19	33	9	17		
J 624 3 HETERODYNING AND MODULATION-DEMULATION (MODEMS) - PERFORM TASKS ON MODULATED OSCILLATORS	72	0	33	32	2	35	32		
K 625 1 AM TRANSMIT OR RECEIVE SYSTEMS - WORK ON	10	0	7	16	17	6	8	AM SYSTEMS	
K 626 1 AM TRANSMIT OR RECEIVE SYSTEMS - INSPECT	9	0	6	15	28	6	7		
K 627 1 AM TRANSMIT OR RECEIVE SYSTEMS - CLEAN	9	0	6	14	5	6	7		

PC1 MRS RESP 'YES'- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOPC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	ALL	SKL	SKL	SKL	SKL	US	O's
	SPC	SPC	SPC	SPC	SPC	SPC	SPC
	018	C19	C20	021	022	027	028
K 628 1 AM TRANSMIT OR RECEIVE SYSTEMS - ALIGN OR ADJUST	9	0	6	14	0	6	7
K 629 1 AM TRANSMIT OR RECEIVE SYSTEMS - TROUBLESHOOT TC SYSTEM	9	0	6	14	0	6	7
K 630 1 AM TRANSMIT OR RECEIVE SYSTEMS - TROUBLESHOOT TO COMPONENTS	9	0	7	13	8	6	7
K 631 1 AM TRANSMIT OR RECEIVE SYSTEMS - REMOVE OR REPLACE SYSTEMS	9	0	7	13	0	6	7
K 632 1 AM TRANSMIT OR RECEIVE SYSTEMS - REMOVE OR REPLACE COMPONENTS	9	0	7	13	0	6	8
K 633 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS RF OSCILLATORS/SYNTHESIZERS	10	0	7	17	17	3	8
K 634 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS CN RF AMPLIFIERS	11	0	8	17	17	6	9
K 635 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON AUDIO AMPLIFIERS	7	0	4	12	17	0	5
K 636 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON POWER AMPLIFIERS	9	0	5	16	17	3	6
K 637 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON LOCAL OSCILLATORS	11	0	9	15	17	6	10
K 638 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON IF AMPLIFIERS	11	0	9	16	17	6	10
K 639 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS CN DETECTORS	11	0	8	17	17	6	9
K 640 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS CN MIXER AMPLIFIERS	10	0	8	15	17	6	9
K 641 1 AM TRANSMIT OR RECEIVE SYSTEMS - USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS	6	0	4	9	25	3	4
K 642 1 AM TRANSMIT OR RECEIVE SYSTEMS - USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS	7	0	5	11	25	3	6
K 643 1 AM TRANSMIT OR RECEIVE SYSTEMS - USE OR REFER TO SENSITIVITY OF RECEIVERS	11	0	9	16	25	6	10
K 644 1 AM TRANSMIT OR RECEIVE SYSTEMS - USE OR REFER TO SELECTIVITY OF RECEIVERS	8	0	5	13	17	3	6
K 645 2 FM TRANSMIT OR RECEIVE SYSTEMS - WORK WITH	12	100	13	9	17	9	14
K 646 2 FM TRANSMIT OR RECEIVE SYSTEMS - INSPECT	10	0	12	7	25	6	14
K 647 2 FM TRANSMIT OR RECEIVE SYSTEMS - CLEAN	10	0	12	6	0	6	14
K 648 2 FM TRANSMIT OR RECEIVE SYSTEMS - ALIGN	10	0	13	6	0	9	14
K 649 2 FM TRANSMIT OR RECEIVE SYSTEMS - TROUBLESHOOT TO SYSTEM COMPONENTS	10	0	13	6	8	9	14
K 650 2 FM TRANSMIT OR RECEIVE SYSTEMS - TROUBLESHOOT TO COMPONENTS	10	0	12	7	8	9	13
K 651 2 FM TRANSMIT OR RECEIVE SYSTEMS - REMOVE OR REPLACE SYSTEM COMPONENTS	10	0	12	7	0	6	14
K 652 2 FM TRANSMIT OR RECEIVE SYSTEMS - REMOVE OR REPLACE COMPONENTS	10	0	12	7	0	9	13
K 653 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM LINK PERFORMANCE ASSESSMENTS	6	0	7	5	8	9	6
K 654 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS CN AUDIO AMPLIFIERS	7	0	4	7	8	3	9
K 655 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON FREQUENCY MULTIPLIERS	9	0	10	7	8	6	11

PCT MBRS RESP 'YES' - 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFORS IATCL RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	ALL	3	5	7	9	5	5	5
	SKL	SKL	SKL	SKL	SKL	US	O's	
	SPC	SPC	SPC	SPC	SPC	SPC	SPC	
	018	019	020	021	022	027	028	
K 656 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS)	10	0	12	7	8	9	13	
K 657 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON POWER AMPLIFIERS	10	0	12	7	8	6	14	
K 658 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON RF AMPLIFIERS	11	0	12	8	8	5	13	
K 659 2 TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON FREQUENCY CONVERTERS	10	0	11	7	8	3	13	
K 660 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON IF AMPLIFIERS	10	0	12	7	8	6	13	
K 661 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON LIMITERS	9	0	11	7	8	3	13	
K 662 2 FM TRANSMIT OR RECEIVER SYSTEMS - PERFORM TASKS ON FREQUENCY DISCRIMINATORS	10	0	12	7	8	5	13	
K 663 2 FM TRANSMIT OR RECEIVE SYSTEMS - TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS	12	0	14	9	25	9	15	
K 664 2 FM TRANSMIT OR RECEIVE SYSTEMS - TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS	11	0	14	7	25	5	15	
K 665 2 TRANSMIT OR RECEIVE SYSTEMS - TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS	9	0	11	5	25	3	13	
K 666 2 FM TRANSMIT OR RECEIVE SYSTEMS - PLOT RECEIVE SIGNAL LEVEL CURVES (RSL)	5	0	5	4	8	0	6	
K 667 3 NUMBERING SYSTEMS - CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS	21	0	17	27	8	18	17	NUMBERING SYSTEMS
K 668 3 NUMBERING SYSTEMS - CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS	28	0	24	35	25	29	24	
K 669 3 NUMBERING SYSTEMS - CONVERT DECIMAL NUMBERS HEXADECIMAL (BASE 16) NUMBERS	7	0	7	7	8	0	8	
K 670 3 NUMBERING SYSTEMS - CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS	20	0	15	27	8	12	16	
K 671 3 NUMBERING SYSTEMS - CONVERT OCTAL NUMBERS TO BINARY NUMBERS	20	0	16	27	8	21	16	
K 672 3 NUMBERING SYSTEMS - CONVERT OCTAL NUMBERS TO HEXADECIMAL NUMBERS	6	0	6	6	8	0	7	
K 673 3 NUMBERING SYSTEMS - CONVERT BINARY NUMBERS TO DECIMAL NUMBERS	28	0	24	34	25	29	23	
K 674 3 NUMBERING SYSTEMS - CONVERT BINARY NUMBERS TO OCTAL NUMBERS	20	0	16	25	8	18	17	
K 675 3 NUMBERING SYSTEMS - CONVERT BINARY NUMBERS TO HEXADECIMAL NUMBERS	5	0	5	7	8	0	6	
K 676 3 NUMBERING SYSTEMS - CONVERT HEXADECIMAL NUMBERS TO DECIMAL NUMBERS	6	0	5	8	8	0	6	
K 677 3 NUMBERING SYSTEMS - CONVERT HEXADECIMAL NUMBERS TO OCTAL NUMBERS	5	0	5	7	8	0	6	
K 678 3 NUMBERING SYSTEMS - CONVERT HEXADECIMAL NUMBERS TO BINARY NUMBERS	5	0	5	7	8	0	6	
K 679 3 NUMBERING SYSTEMS - ADD BINARY NUMBERS	22	0	18	28	25	15	19	

PCT MBRS RESP 'YES'- 303X3 DAFSC/CONUS/OS GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

OY-TSK

	ALL	3	5	7	9	5	5
	SKL	SKL	SKL	SKL	SKL	US	O's
	SPC	SPC	SPC	SPC	SPC	SPC	SPC
	Q18	Q19	Q20	Q21	Q22	Q27	Q28
K 680 3 NUMBERING SYSTEMS - SUBTRACT BINARY NUMBERS USING THE THE END-AROUND-CARRY METHOD	16	0	14	21	17	9	15
K 681 3 NUMBERING SYSTEMS - SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD	19	0	16	23	17	12	17
K 682 3 NUMBERING SYSTEMS - ADD OCTAL NUMBERS	13	0	12	16	8	3	14
K 683 3 NUMBERING SYSTEMS - ADD HEXADEMICAL NUMBERS	5	0	5	6	8	0	6
K 684 3 NUMBERING SYSTEMS - SUBTRACT HEXADEMICAL NUMBERS	5	0	5	6	8	0	6
K 685 3 NUMBERING SYSTEMS - DIVIDE BINARY NUMBERS	9	0	8	12	17	0	10
K 686 3 NUMBERING SYSTEMS - MULTIPLY BINARY NUMBERS	11	0	9	14	17	3	11
K 687 3 NUMBERING SYSTEMS - USE OR REFER TO BINARY CODEC DECIMAL (BCD)	26	0	22	33	25	26	21
K 688 3 NUMBERING SYSTEMS - USE OR REFER TO GRAY CODE	15	0	11	22	25	12	11
K 689 3 NUMBERING SYSTEMS - USE OR REFER TO IC40 CODE	1	0	1	0	17	0	1
K 690 3 NUMBERING SYSTEMS - USE OR REFER TO EXCESS-3 CODE	2	0	3	1	17	0	3
L 691 1 LOGIC FUNCTIONS - PERFORM TASKS RELATING TO SYMBOLS OR GATES	28	0	28	28	33	29	28
L 692 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR AND LOGIC	19	0	18	21	25	15	20
L 693 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR (OR) LOGIC	19	0	18	20	25	15	19
L 694 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR (AND) OR (OR) LOGIC SYMBOLS WITH STATE INDICATORS	19	0	18	20	25	15	19
L 695 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR EXCLUSIVE (OR) LOGIC SYMBOLS OR GATES	19	0	18	20	25	15	20
L 696 1 LOGIC FUNCTIONS - USE OR REFER TO TRUTH TABLES FOR (AND)	23	0	22	26	33	18	24
L 697 1 LOGIC FUNCTIONS - USE OR REFER TO TRUTH TABLES FOR (OR)	23	0	22	26	33	18	24
L 698 1 LOGIC FUNCTIONS - USE OR REFER TO TRUTH TABLES FOR (AND)	23	0	22	26	33	18	23
L 699 1 LOGIC FUNCTIONS - USE OR REFER TO TRUTH TABLES FOR (EXCLUSIVE OR) LOGIC SYMBOLS	23	0	22	26	33	18	24
L 700 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIC SYMBOLS FOR (AND)	28	0	27	29	33	26	27
L 701 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIC SYMBOLS FOR (OR)	27	0	27	28	33	26	27
L 702 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIX SYMBOLS FOR (NAND) OR (NOR) GATES	28	0	27	30	33	26	27
L 703 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIC SYMBOLS FOR (EXCLUSIVE OR) GATES	27	0	26	27	33	26	27
L 704 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIC SYMBOLS FOR INHIBITED (AND) GATES	25	0	24	27	33	24	24
L 705 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIC SYMBOLS FOR "8" BARS	5	0	4	6	8	3	4
L 706 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIC SYMBOLS FOR "M" BARS	5	0	4	6	8	3	4
L 707 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIC SYMBOLS FOR COMBINERS	7	0	5	9	8	6	5

PCT M8RS RESP 'YES'-- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	3	5	7	9	5	5	
	ALL	SKL	SKL	SKL	US	O's	
	SPC	SPC	SPC	SPC	SPC	SPC	
	01A	019	020	021	022	028	
L 708 1 LOGIC FUNCTIONS - USE OR REFER TO FLIP-FLOP MULTI-VIBRATOR SYMBOLS	27	0	26	30	33	21	27
L 709 1 LOGIC FUNCTIONS - USE OR REFER TO ONE-SHOT MULTI-VIBRATOR SYMBOLS	27	0	26	30	33	21	27
L 710 1 LOGIC FUNCTIONS - USE OR REFER TO FLIP-FLOP CIRCUIT OR SCHEMATIC DIAGRAMS	28	0	26	30	33	21	27
L 711 1 LOGIC FUNCTIONS - USE OR REFER TO ONE-SHOT CIRCUIT OR SCHEMATIC DIAGRAMS	26	0	23	30	33	18	25
L 712 1 LOGIC FUNCTIONS - USE OR REFER TO FLIP-FLOP TRUTH TABLES	21	0	18	26	33	12	20
L 713 1 LOGIC FUNCTIONS - USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS	21	0	19	25	33	18	20
L 714 1 LOGIC FUNCTIONS - USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS	20	0	18	23	33	18	19
L 715 1 LOGIC FUNCTIONS - USE OR REFER TO NONCOMPLEMENTED FLIP-FLOP LOGIC SYMBOLS	20	0	18	22	33	18	19
L 716 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR "B" BARS	1	0	2	1	8	0	2
L 717 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR "M" BARS	1	0	2	1	8	0	2
L 718 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR COMBINERS	3	0	3	4	9	3	2
L 719 1 LOGIC FUNCTIONS - MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS	22	0	23	20	25	24	24
L 720 1 LOGIC FUNCTIONS - TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS	21	0	19	22	33	21	20
L 721 1 LOGIC FUNCTIONS - TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS	20	0	18	22	33	21	19
L 722 1 LOGIC FUNCTIONS - TRACE DATA FLOW THROUGH NONCOMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS	20	0	18	22	33	21	19
L 723 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS	14	0	14	14	33	15	14
L 724 2 BOOLEAN EQUATIONS - PERFORM TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC CIRCUITS	11	0	10	13	17	9	11
L 725 2 BOOLEAN EQUATIONS - DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS	7	0	6	8	8	9	5
L 726 1 BOOLEAN EQUATIONS - CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS	4	0	4	4	8	3	4
L 727 2 BOOLEAN EQUATIONS - DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS	5	0	4	6	8	3	4
L 728 2 BOOLEAN EQUATIONS - MEASURE INPUTS OR OUTPUTS OF LOGIC GATES	12	0	12	13	8	12	12
L 729 2 BOOLEAN EQUATIONS - DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS	7	0	7	7	8	6	6
L 730 2 BOOLEAN EQUATIONS - ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA	7	0	7	8	8	6	6
L 731 2 BOOLEAN EQUATIONS - USE OR REFER TO LOGIC SYMBOLS FOR DTR COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES	8	0	8	8	11	12	7
L 732 2 BOOLEAN EQUATIONS - USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS	4	0	3	5	8	3	3
L 733 2 BOOLEAN EQUATIONS - USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE	11	0	11	13	17	12	11

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

PERCENT MEMBERS PERFORMING													
DY-TSK													
		ALL	3	5	7	9	5	5	5	5	5	5	5
		SPC	SKL	SPC	SKL	SPC	SKL	SPC	SKL	SPC	SKL	SPC	SKL
		018	019	020	021	022	023	024	025	026	027	028	029
L 734	2 BOOLEAN EQUATIONS - COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS	8	0	7	9	8	9	6					
L 735	2 BOOLEAN EQUATIONS - TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS	8	0	7	9	8	9	7					
L 736	3 COUNTERS - WORK WITH DIGITAL COUNTERS	29	0	28	30	17	26	29					
L 737	3 COUNTERS - USE OR REFER TO UP-COUNTERS	28	0	27	30	17	24	28					
L 738	3 COUNTERS - USE OR REFER TO DOWN-COUNTERS	27	0	25	29	17	24	26					
L 739	3 COUNTERS - USE OR REFER TO SERIAL COUNTERS	26	0	24	28	17	21	25					
L 740	3 COUNTERS - USE OR REFER TO PARALLEL COUNTERS	22	0	19	27	17	21	20					
L 741	3 COUNTERS - USE OR REFER TO RING COUNTERS	9	0	7	12	17	3	8					
L 742	3 COUNTERS - USE OR REFER TO DECADE (MOD 10) COUNTERS	21	0	19	25	17	24	19					
L 743	3 COUNTERS - USE OR REFER TO COUNT DEFECT CIRCUITS	17	0	14	22	17	12	16					
L 744	3 COUNTERS - USE OR REFER TO DOWN CLOCKS	27	0	25	31	17	26	25					
L 745	3 COUNTERS - USE OR REFER TO UP CLOCKS	28	0	26	31	17	26	26					
L 746	3 COUNTERS - USE OR REFER TO OTHER MODULOUS COUNTERS	15	0	13	17	17	12	14					
L 747	3 COUNTERS - TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS	24	0	21	29	17	21	22					
L 748	3 COUNTERS - TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DOWN-COUNTERS	24	0	22	28	17	24	22					
L 749	3 COUNTERS - TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-DOWN COUNTERS	21	0	17	27	17	18	18					
L 750	3 COUNTERS TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS	22	0	18	28	17	24	18					
L 751	3 COUNTERS - TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS	9	0	6	13	17	3	7					
L 752	3 COUNTERS - TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF COUNTERS FEEDING STORAGE REGISTERS	19	0	14	27	17	15	15					
L 753	3 COUNTERS - TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	21	0	17	26	17	21	17					
L 754	3 COUNTERS - TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS	13	0	10	17	17	9	11					
L 755	3 COUNTERS - CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS	9	0	8	11	17	6	9					
L 756	3 COUNTERS - DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES	9	0	8	12	17	6	8					
L 757	3 COUNTERS - DETERMINE THE APPROPRIATE AND GATE NECESSARY IN COUNT DEFECT CIRCUITS TO INDICATE A REQUIRED COUNT	16	0	13	19	17	15	14					
M 758	1 TIMING CIRCUITS - WORK WITH SAWTOOTH WAVE GENERATORS	49	0	50	47	58	41	52					
M 759	1 TIMING CIRCUITS - WORK WITH TRAPEZOIDAL WAVE GENERATORS	39	0	40	34	50	26	42					
M 760	1 TIMING CIRCUITS - WORK WITH PULSED OSCILLATORS	42	0	43	41	58	35	45					
M 761	1 TIMING CIRCUITS - WORK WITH BLOCKING OSCILLATORS	47	0	47	47	58	38	49					
M 762	1 TIMING CIRCUITS - WORK WITH MASTER STATION TIMING	18	0	17	19	33	9	19					
M 763	1 TIMING CIRCUITS - USE OR REFER TO RISE TIME	47	0	48	46	50	47	48					
M 764	1 TIMING CIRCUITS - USE OR REFER TO FALL OR FLYBACK TIME	46	0	48	43	50	50	47					
M 765	1 TIMING CIRCUITS - USE OR REFER TO SWEEP TIME	51	0	54	46	58	50	55					
M 766	1 TIMING CIRCUITS - USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS	44	0	48	38	58	44	49					

PCT MORS RESP 'YES' - 303X3 DAFSC/CONUS/OS GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

GY-TSM

	3	5	7	9	5	5
	ALL	SKL	SKL	SKL	US	O's
	SPC	SPC	SPC	SPC	SPC	SPC
	018	019	020	021	022	027
						028

	42	0	45	38	50	44	46
M 767 1 TIMING CIRCUITS - USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS	42	0	45	38	50	44	46
M 768 1 TIMING CIRCUITS - USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS	41	0	42	38	58	38	42
M 769 1 TIMING CIRCUITS - USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS	43	0	46	39	58	41	46
M 770 2 SIGNAL GENERATORS - USE	51	100	56	42	50	56	57
M 771 2 SIGNAL GENERATORS - PERFORM OPERATIONAL CHECKS WHILE USING	48	0	53	41	50	53	54
M 772 2 SIGNAL GENERATORS - PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING	41	0	46	32	25	44	46
M 773 2 SIGNAL GENERATORS - TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING	34	0	38	26	25	38	39
M 774 2 SIGNAL GENERATORS - TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING	28	0	32	22	25	38	32
M 775 2 SIGNAL GENERATORS - USE AUDIO SINE-WAVE GENERATORS	20	0	18	23	33	12	19
M 776 2 SIGNAL GENERATORS - USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE	20	0	15	27	33	15	16
M 777 2 SIGNAL GENERATORS - USE RF GENERATORS LESS THAN 1,000 MH	20	0	18	22	47	18	19
M 778 2 SIGNAL GENERATORS - USE RF GENERATORS GREATER THAN 1,000 MH	41	0	44	36	50	38	46
M 779 2 SIGNAL GENERATORS - USE WHITE NOISE GENERATORS	4	0	4	4	0	3	4
M 780 2 SIGNAL GENERATORS - USE PATTERN GENERATORS	7	0	6	9	17	6	6
M 781 2 SIGNAL GENERATORS - USE PSEUDO-RANDOM GENERATORS	2	0	2	3	0	0	2
M 782 2 SIGNAL GENERATORS - USE TIME MARK GENERATORS	27	0	29	22	50	15	32
M 783 2 SIGNAL GENERATORS - USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS	27	0	27	27	42	21	29
M 784 3 MOTORS/GENERATORS - PERFORM TASK DEALING WITH AC OR DC MOTORS	52	100	57	44	67	53	58
M 785 3 MOTORS - INSPECT	50	0	55	42	67	47	57
M 786 3 MOTORS - CLEAN OR LUBRICATE	48	0	53	39	25	47	55
M 787 3 MOTORS - OPERATE	47	0	51	41	33	47	52
M 788 3 MOTORS - REMOVE OR REPLACE COMPLETE	50	0	55	42	33	53	56
M 789 3 MOTORS - REMOVE OR REPLACE PARTS	35	0	37	32	17	38	38
M 790 3 MOTORS - TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF	49	0	54	41	42	53	54
M 791 3 MOTORS - TROUBLESHOOT DOWN TO COMPONENT PARTS OF	27	0	27	27	8	24	28
M 792 3 MOTORS - PERFORM ANY TASKS ON FIELD COILS	16	0	14	16	8	12	17
M 793 3 MOTORS - PERFORM ANY TASKS ON ARMATURES	20	0	21	20	25	14	22
M 794 3 MOTORS - PERFORM ANY TASKS ON ROTORS	22	0	21	20	25	21	23
M 795 3 MOTORS - PERFORM ANY TASKS ON BRUSHES	40	0	42	36	33	36	43
M 796 3 MOTORS - PERFORM ANY TASKS ON SLIP RINGS	33	0	36	28	25	26	39
M 797 3 MOTORS - PERFORM ANY TASKS ON COMMUTATORS	27	0	28	27	25	21	29
M 798 3 MOTORS - PERFORM ANY TASKS ON POLE PIECES	14	0	14	13	8	14	15
M 799 3 MOTORS - DETERMINE OR MEASURE FORCE OR TORQUE	9	0	10	7	8	6	11
M 800 3 MOTORS - DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE	16	0	16	17	17	6	19

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

PCI MBR\$ RESP 'YES'- 303X3 DAFSC/CONUS/OS GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	ALL	3	5	7	9	5	5
	SKL	SKL	SKL	SKL	SKL	US	O'm
	SPC	SPC	SPC	SPC	SPC	SPC	SPC
	Q19	Q20	Q21	Q22	Q27	Q28	
M 801 3 MOTORS - DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE	17	0	18	15	0	15	19
M 802 3 MOTORS - WORK WITH SYNCHRONOUS MOTORS	34	0	35	32	58	24	38
M 803 3 MOTORS - WORK WITH INDUCTION MOTORS	31	0	29	33	58	26	30
M 804 3 MOTORS - WORK WITH SPLIT-PHASE MOTORS	24	0	25	24	50	18	27
M 805 3 MOTORS - WORK WITH SOME COMBINATION OF SYNCHRONOUS, INDUCTION, SPLIT-PHASE MOTORS	30	0	31	29	33	21	33
M 806 3 MOTORS - WORK WITH SERVOS OR SYNCHROS	51	0	56	42	67	53	57
M 807 3 GENERATORS/ALTERNATORS - INSPECT	35	0	38	32	67	26	40
M 808 3 GENERATORS/ALTERNATORS - CLEAN OR LUBRICATE	31	0	32	29	25	21	34
M 809 3 GENERATORS/ALTERNATORS - OPERATE	33	0	34	32	25	21	37
M 810 3 GENERATORS/ALTERNATORS - REMOVE OR REPLACE	27	0	27	27	33	21	28
M 811 3 GENERATORS/ALTERNATORS - REMOVE OR REPLACE PARTS	19	0	20	18	25	15	21
M 812 3 GENERATORS/ALTERNATORS - TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS	32	0	33	30	42	24	35
M 813 3 GENERATORS/ALTERNATORS - TROUBLESHOOT DOWN TO COMPONENT PARTS	17	0	20	13	8	12	21
N 814 1 METERS - WORK WITH METERS	61	100	66	52	75	59	68
N 815 1 METERS - CONSIDER THE FUNCTIONS OF PERMANENT MAGNETS	23	0	23	22	17	21	24
N 816 1 METERS - CONSIDER THE FUNCTIONS OF MOVING COILS	26	0	27	24	17	26	27
N 817 1 METERS - CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS	18	0	18	19	8	12	19
N 818 1 METERS - READ METER SCALES	61	100	65	53	75	59	67
N 819 1 METERS - EXTEND THE RANGE OF AMMETERS	32	0	34	30	33	26	35
N 820 1 METERS - ZERO OHMMETERS	59	100	65	50	50	56	67
N 821 1 METERS - ZERO OHMMETERS	38	0	41	33	50	41	41
N 822 1 METERS - EXTEND THE RANGE OF VOLTMETERS	45	100	51	34	42	50	52
N 823 1 METERS - USE OR REFER TO VOLTMETER SENSITIVITY	43	0	44	42	58	41	46
N 824 1 METERS - CONSIDER BALLASTIC RESPONSE OF METER MOVEMENTS	5	0	6	5	0	9	5
N 825 1 METERS - CONSIDER OTHER METER MOVEMENTS	23	100	25	19	17	21	26
N 826 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - WORK WITH	19	0	21	17	33	15	22
N 827 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - INSPECT	17	0	18	14	33	12	20
N 828 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - CLEAN	15	0	17	12	17	9	19
N 829 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - ADJUST	16	0	17	14	17	9	19
N 830 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - TROUBLESHOOT	16	0	17	13	17	9	19
N 831 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - REMOVE OR REPLACE	15	0	17	12	17	12	18
N 832 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - REMOVE OR REPLACE COMPONENTS	11	0	13	9	17	6	14
N 833 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - USE OR REFER TO HYSTERESIS CURVES OR LOOPS	4	0	4	5	0	0	4
N 834 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS	10	0	8	14	8	3	9
N 835 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS	11	0	10	13	0	3	11
N 836 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS FOR MAGNETIC AMPLIFIERS	11	0	11	13	8	3	13

PCT MGRS RESP 'YES' - 30X3 DAFSC/CONUS/OS GRPS

TASK GROUP SUMMARY

DY-TSK

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

	3	5	7	9	5	5
ALL	SKL	SKL	SKL	SKL	US	0's
SPC	SPC	SPC	SPC	SPC	SPC	SPC
018	019	020	021	022	027	028

N	837	2	MAGNETIC AMPLIFIERS/SATURABLE REACTORS - USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS	15	0	13	17	33	12	14
N 838	3	WAVESHAPING CIRCUITS - WORK WITH WAVESHAPING CIRCUITS - USE OR REFER TO TRANSIENT INTERVALS (RISE TIME AND FALL TIME)	49	0	51	46	67	50	51	WAVESHAPING CIRCUITS
N 839	3	WAVESHAPING CIRCUITS - USE OR REFER TO TRANSIENT INTERVALS (RISE TIME AND FALL TIME)	38	0	40	36	58	35	41	
N 840	3	WAVESHAPING CIRCUITS - USE OR REFER TO PULSE WIDTH (PW)	50	0	52	47	67	50	52	
N 841	3	WAVESHAPING CIRCUITS - USE OR REFER TO PULSE RECURRENCE TIME (PRT)	50	0	52	47	67	50	52	
N 842	3	WAVESHAPING CIRCUITS - USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	50	0	52	47	67	50	52	
N 843	3	WAVESHAPING CIRCUITS - USE OR REFER TO DIFFERENTIATING CIRCUITS	47	0	47	47	67	47	47	
N 844	3	WAVESHAPING CIRCUITS - USE OR REFER TO INTEGRATING CIRCUITS	45	0	45	46	67	50	44	
N 845	3	WAVESHAPING CIRCUITS - USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT	30	0	30	32	42	29	30	
N 846	3	WAVESHAPING CIRCUITS - DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT AND OUTPUT CONFIGURATION	26	0	26	27	42	21	26	
N 847	3	WAVESHAPING CIRCUITS - WORK WITH SQUARE WAVE GENERATORS	31	0	30	34	50	21	32	
N 848	3	WAVESHAPING CIRCUITS - WORK WITH RECTANGLE WAVE GENERATORS	23	0	22	27	50	9	24	
N 849	3	WAVESHAPING CIRCUITS - WORK WITH TRIANGULAR (SAWTOOTH) WAVE GENERATORS	27	0	27	27	50	12	30	
N 850	3	WAVESHAPING CIRCUITS - WORK WITH RAMP (TRAPEZOIDICAL) GENERATORS	22	0	20	24	33	6	23	
N 851	3	WAVESHAPING CIRCUITS - WORK WITH FUNCTION GENERATORS	17	0	13	24	42	9	15	
N 852	1	SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - WORK ON SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - INSPECT TRANSMIT OR RECEIVE SYSTEMS	3	0	4	2	0	0	4	SINGLE OR INDEPENDENT SIDEBAND SYSTEMS
N 853	1	SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - CLEAN TRANSMIT OR RECEIVE SYSTEMS	3	0	5	2	0	0	5	
N 854	1	SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - ALIGN TRANSMIT OR RECEIVE SYSTEMS	3	0	4	2	0	0	4	
N 855	1	SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - TROUBLESHOOT TO TRANSMIT OR RECEIVE SYSTEMS	3	0	5	2	0	0	5	
N 856	1	SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - TROUBLESHOOT TO TRANSMIT OR RECEIVE SYSTEMS	3	0	4	2	0	0	4	
N 857	1	SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - TROUBLESHOOT TO TRANSMIT OR RECEIVE COMPONENTS	3	0	4	2	0	0	4	
N 858	1	SINGLE INDEPENDENT SIDEBAND SYSTEMS - REMOVE OR REPLACE TRANSMIT OR RECEIVE SYSTEMS	3	0	3	2	0	0	3	
N 859	1	SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - REMOVE OR REPLACE TRANSMIT OR RECEIVE COMPONENTS	3	0	4	2	0	0	4	
N 860	1	SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON AUDIO AMPLIFIERS	2	0	2	2	0	0	2	
N 861	1	SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON BALANCED MODULATORS	3	0	4	2	0	0	4	
N 862	1	SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON CARRIER OSCILLATORS	3	0	3	2	0	0	3	

PCT MBRS RESP *YES*- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOPMC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	ALL SPC 018	3 C19	SKL SPC C20	5 C20	SKL SPC 021	9 SPC 022	5 US SPC G27	5 O's SPC 028
0 863 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON LC FILTERS	3	0	4	2	0	0	4	
0 864 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON CRYSTAL FILTERS	3	0	3	2	0	0	4	
0 865 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON MECHANICAL FILTERS	2	0	3	2	0	0	3	
0 866 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON OSCILLATORS	3	0	4	2	0	0	4	
0 867 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON MIXERS	3	0	4	2	0	0	4	
0 868 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON DRIVERS	3	0	5	2	0	0	5	
0 869 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON POWER AMPLIFIERS	4	0	5	2	0	0	6	
0 870 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON RF AMPLIFIERS	3	0	4	2	0	0	4	
0 871 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON FREQUENCY CONVERTERS	3	0	4	2	0	0	4	
0 872 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON IF AMPLIFIERS	4	0	5	2	0	0	6	
0 873 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON DEMODULATORS	3	0	4	2	0	0	4	
0 874 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - USE OR REFER TO SELECTIVE FADING	1	0	1	2	0	0	1	
0 875 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - USE OR REFER TO PEAK POWER	3	0	3	2	0	0	3	
0 876 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - USE OR REFER TO FREQUENCY STABILITY	2	0	3	2	0	0	2	
0 877 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS	2	0	2	2	0	0	2	
0 878 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - CALCULATE PEAK POWER OR EFFECTIVE POWER OF TRANSMITTERS	2	0	2	2	0	0	2	
0 879 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - TRACE SIGNALS OR CURRENT PATHS THROUGH TRANSMITTER SCHEMATIC DIAGRAMS	2	0	2	2	0	0	2	
0 880 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - TRACE SIGNALS OR CURRENT PATHS THROUGH RECEIVER SCHEMATIC DIAGRAMS	2	0	2	2	0	0	2	
0 881 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM AERONAUTIC STATION ASSESSMENT PROGRAMS (ASAP)	0	0	1	0	0	0	1	
0 882 2 PULSE MODULATION SYSTEMS - WORK ON	37	0	39	35	75	41	39	PULSE MODULATION SYSTEMS
0 883 2 PULSE MODULATION SYSTEMS - INSPECT	36	0	38	33	75	41	38	
0 884 2 PULSE MODULATION SYSTEMS - CLEAN	33	0	36	28	33	38	36	
0 885 2 PULSE MODULATION SYSTEMS - ALIGN	34	0	36	32	33	38	36	
0 886 2 PULSE MODULATION SYSTEMS - TROUBLESHOOT SYSTEM	36	0	38	32	33	41	38	
0 887 2 PULSE MODULATION SYSTEMS - TROUBLESHOOT COMPONENTS	35	0	37	32	33	41	37	
0 888 2 PULSE MODULATION SYSTEMS - REMOVE OR REPLACE	33	0	37	27	33	41	36	
0 889 2 PULSE MODULATION SYSTEMS - REMOVE OR REPLACE COMPONENTS	34	0	37	31	33	41	36	
0 890 2 PULSE MODULATION SYSTEMS - WORK ON PULSE-AMPLITUDE MODULATION (PAM)	25	0	27	22	58	35	25	

DY-TSK

OCCUPATIONAL ANALYSIS PROGRAM
USAFQMC (ATC) RANDOLPH AFB TX

PERCENT MEMBERS PERFORMING		DY-TSK																															
		ALL				3				5				7				9				US				O's							
		SPC				SPC				SPC				SPC				SPC				SPC				SPC				SPC			
		018				019				020				021				022				027				028							
0	891 2 PULSE MODULATION SYSTEMS - WORK ON PULSE-DURATION MODULATION (PDM)	17	0	20	13	50	26	18																									
0	892 2 PULSE MODULATION SYSTEMS - WORK ON PULSE-POSITION MODULATION (PPM)	9	0	9	10	42	9	10																									
0	893 2 PULSE MODULATION SYSTEMS - WORK ON PULSE-CODE MODULATION (PCM)	10	0	9	11	42	15	9																									
0	894 2 PULSE MODULATION SYSTEMS - WORK ON LINE PULSING MODULATION	11	0	7	17	25	6	7																									
0	895 2 PULSE MODULATION SYSTEMS - DON'T KNOW TYPE OF MODULATION SYSTEM WORKED ON	10	0	15	3	0	12	15																									
0	896 2 PULSE MODULATION SYSTEMS - WORK ON TIME DIVISION MULTIPLEXING (TDM)	3	0	2	5	25	0	2																									
0	897 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON POWER SUPPLIES	35	0	38	32	42	41	38																									
0	898 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON CHARGING CHOKES AND CHARGING DIODES	30	0	31	30	42	35	31																									
0	899 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON PULSE FORMING NETWORKS	35	0	36	32	42	41	36																									
0	900 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON TIMERS	27	0	28	26	42	35	27																									
0	901 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON SWITCHES SUCH AS GAS THYRATRONS	30	0	30	30	42	32	30																									
0	902 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON PULSE TRANSFORMERS	35	0	37	32	42	38	37																									
0	903 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON TRANSMITTER TUBES	34	0	35	32	42	38	35																									
0	904 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON RF AMPLIFIERS	33	0	35	31	42	35	36																									
0	905 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON FREQUENCY CONVERTERS	27	0	28	27	33	21	30																									
0	906 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON IF AMPLIFIERS	34	0	36	32	42	38	37																									
0	907 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON DETECTORS	34	0	35	32	42	35	36																									
0	908 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON VIDEO AMPLIFIERS	34	0	36	32	42	38	36																									
0	909 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON POWER VIDEO AMPLIFIERS	23	0	24	22	17	15	26																									
0	910 2 PULSE MODULATION SYSTEMS - USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	36	0	37	35	75	41	37																									
0	911 2 PULSE MODULATION SYSTEMS - USE OR REFER TO PULSE RECURRENCE TIME (PRT)	36	0	37	34	75	41	37																									
0	912 2 PULSE MODULATION SYSTEMS - USE OR REFER TO PULSE WIDTH (PW)	37	0	38	35	75	41	38																									
0	913 2 PULSE MODULATION SYSTEMS - USE OR REFER TO PULSE SHAPE	35	0	37	33	75	41	36																									
0	914 2 PULSE MODULATION SYSTEMS - USE OR REFER TO PEAK POWER	35	0	36	34	75	38	36																									
0	915 2 PULSE MODULATION SYSTEMS - USE OR REFER TO AVERAGE POWER	35	0	37	32	75	41	36																									
0	916 2 PULSE MODULATION SYSTEMS - USE OR REFER TO DUTY CYCLE (DC)	29	0	28	31	75	26	29																									
0	917 2 PULSE MODULATION SYSTEMS - CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	31	0	32	29	75	29	33																									

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

PCT MBR RESP 'YES'- 303X3 DAFSC/CONUS/OS GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	ALL	3	5	7	9	5	5	0's
	SKL	SKL	SKL	SKL	SKL	SKL	SKL	SKL
0 918 2 PULSE MODULATION SYSTEMS - MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	34	0	35	32	67	35	35	
0 919 2 PULSE MODULATION SYSTEMS - USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS	26	0	27	24	67	24	27	
0 920 2 PULSE MODULATION SYSTEMS - TRACE SIGNALS OR CURRENT PATHS THROUGH TRANSMITTER SCHEMATIC DIAGRAMS	35	0	38	32	58	38	38	
0 921 2 PULSE MODULATION SYSTEMS - TRACE SIGNALS OR CURRENT PATHS THROUGH RECEIVER SCHEMATIC DIAGRAMS	34	0	36	30	58	38	36	
0 922 3 ANTENNAS - WORK WITH	58	0	62	51	67	65	62	62 ANTENNAS
0 923 3 ANTENNAS - INSPECT	54	0	58	47	67	62	58	
0 924 3 ANTENNAS - CLEAN	51	0	57	42	25	59	57	
0 925 3 ANTENNAS - PHYSICALLY ALIGN	53	0	58	44	33	53	59	
0 926 3 ANTENNAS - ELECTRICALLY ALIGN	53	0	58	44	33	56	59	
0 927 3 ANTENNAS - TROUBLESHOOT TO	53	0	59	43	33	59	59	
0 928 3 ANTENNAS - TROUBLESHOOT TO COMPONENTS	50	0	57	40	33	62	56	
0 929 3 ANTENNAS - REMOVE OR INSTALL	48	0	53	42	33	53	53	
0 930 3 ANTENNAS - REMOVE OR REPLACE COMPONENTS	51	0	56	43	33	62	56	
0 931 3 ANTENNAS - USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES	13	0	14	11	25	15	14	
0 932 3 ANTENNAS - USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES	14	0	15	12	25	15	14	
0 933 3 ANTENNAS - DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE	10	0	12	8	17	15	11	
0 934 3 ANTENNAS - USE OR REFER TO THE GENERAL RULE THAT ANTENNAS OF CORRECT LENGTH (HALF-WAVE) ACT AS RESISTIVE LOADS TO THE GENERATOR	13	0	15	9	25	15	14	
0 935 3 ANTENNAS - USE OR REFER TO THE GENERAL RULE THAT ANTENNAS LONGER THAN HALF-WAVE ACT AS INDUCTIVE LOADS TO THE GENERATOR	10	0	11	7	25	12	11	
0 936 3 ANTENNAS - USE OR REFER TO THE GENERAL RULE THAT ANTENNAS SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS TO THE GENERATOR	9	0	9	7	17	12	8	
0 937 3 ANTENNAS - WORK WITH HERTZ	3	0	4	1	0	0	5	
0 938 3 ANTENNAS - WORK WITH MARCONI	2	0	2	1	0	3	2	
0 939 3 ANTENNAS - WORK WITH RHOMBIC	2	0	2	2	0	0	2	
0 940 3 ANTENNAS - WORK WITH DIPOLE	20	0	22	16	42	26	22	
0 941 3 ANTENNAS - WORK WITH SCIMITAR	1	0	1	1	0	0	1	
0 942 3 ANTENNAS - WORK WITH PARABOLIC	52	0	54	50	67	62	52	
0 943 3 ANTENNAS - WORK WITH GROUND PLANE	6	0	4	8	8	0	5	
0 944 3 ANTENNAS - WORK WITH BROADSIDE ARRAYS	3	0	2	5	17	0	2	
0 945 3 ANTENNAS - WORK WITH END-FIRE ARRAYS	6	0	8	4	8	3	9	
0 946 3 ANTENNAS - WORK WITH CARDIOID ARRAYS	3	0	3	5	0	0	3	
0 947 3 ANTENNAS - WORK WITH COLLINER ARRAYS	3	0	3	3	0	3	2	
0 948 3 ANTENNAS - WORK WITH PHASE ARRAYS	9	0	10	7	25	9	10	
0 949 3 ANTENNAS - USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS	9	0	10	7	9	6	10	

PCT MBRS RESP 'YES'- 303X3 DAFSC/CONUS/05 GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOPC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	ALL	3	5	7	9	5	5	5
	SKL	SKL	SKL	SKL	SKL	US	O's	
	SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC
	018	019	020	021	022	027	028	
0 950 3 ANTENNAS - MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF RADIATION FIELDS	3	0	4	3	0	3	3	3
0 951 3 ANTENNAS - USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS	15	0	17	13	17	21	16	16
0 952 3 ANTENNAS - MEASURE ELECTROMAGNETIC RADIATION FIELDS	5	0	5	4	0	9	4	4
0 953 3 ANTENNAS - USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION	4	0	5	3	0	3	5	5
0 954 3 ANTENNAS - USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD	3	0	4	2	0	3	4	4
0 955 3 ANTENNAS - WORK ON LINEARLY POLARIZED	22	0	22	23	42	21	21	21
0 956 3 ANTENNAS - WORK ON CIRCULARLY POLARIZED	35	0	38	31	42	41	38	38
0 957 3 ANTENNAS - MEASURE OR DETERMINE THE POLARITY OF	20	0	17	24	17	9	19	19
0 958 3 ANTENNAS - CONSTRUCT, OR MAKE CALCULATIONS NECESSARY TO CONSTRUCT ANTENNAS OF CORRECT LENGTH FOR SPECIFIC WAVE LENGTHS	2	0	2	2	8	0	2	2
0 959 3 ANTENNAS - WORK WITH ANTENNA ARRAYS CONTAINING PARASITIC ELEMENTS SERVING AS DIRECTORS	10	0	10	11	0	9	11	11
0 960 3 ANTENNAS - WORK WITH ANTENNA ARRAYS CONTAINING PARASITIC ELEMENTS SERVING AS REFLECTORS	16	0	18	13	8	26	17	17
0 961 3 ANTENNAS - DON'T KNOW WHAT KIND OF ELEMENT ARRAYS WORKED ON CONTAIN	22	0	26	17	8	24	26	26
0 962 3 ANTENNAS - WORK ON UNIDIRECTIONAL	36	0	36	37	42	32	38	38
0 963 3 ANTENNAS - WORK ON BIDIRECTIONAL	14	0	14	14	33	12	14	14
0 964 3 ANTENNAS - WORK WITH ROTARY ARRAYS	28	0	30	26	58	29	29	29
P 965 1 TRANSMISSION LINES - WORK WITH	22	0	22	22	33	24	22	TRANSMISSION LINES
P 966 1 TRANSMISSION LINES - REFER TO OR USE COPPER LOSS OR I2R LOSS	3	0	3	3	0	3	3	3
P 967 1 TRANSMISSION LINES - REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN	6	0	7	6	0	3	7	7
P 968 1 TRANSMISSION LINES - REFER TO OR USE RADIATION LOSS IN	6	0	7	6	8	9	7	7
P 969 1 TRANSMISSION LINES - REFER TO OR USE DIELECTRIC LOSS IN	5	0	5	6	0	9	5	5
P 970 1 TRANSMISSION LINES - REFER TO OR USE LEAKAGE LOSSES IN	6	0	7	6	17	9	7	7
P 971 1 TRANSMISSION LINES - WORK WITH TWISTED PAIR	7	0	7	8	8	15	6	6
P 972 1 TRANSMISSION LINES - WORK WITH TWIN LEAD	6	0	5	7	8	5	4	4
P 973 1 TRANSMISSION LINES - WORK WITH OPEN TWO-WIRE	3	0	4	2	0	6	4	4
P 974 1 TRANSMISSION LINES - WORK WITH FLEXIBLE COAXIAL CABLE	20	0	20	20	33	24	20	20
P 975 1 TRANSMISSION LINES - WORK WITH RIGID COAXIAL CABLE	16	0	15	17	33	21	14	14
P 976 1 TRANSMISSION LINES - TROUBLESHOOT	17	0	19	13	25	21	20	20
P 977 1 TRANSMISSION LINES - ANALYZE VOLTAGE OR CURRENT WAVEFORMS TO DETERMINE THE TYPE OF TERMINATION (OPEN, SHORTED, CAPACITIVE, INDUCTIVE)	6	0	6	6	17	3	7	7
P 978 1 TRANSMISSION LINES - SELECT APPROPRIATE TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS	5	0	5	6	25	3	6	6
P 979 1 TRANSMISSION LINES - USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS	9	0	9	10	25	15	8	8
P 980 1 TRANSMISSION LINES - MEASURE STANDING WAVE RATIOS (SWR)	15	0	14	15	17	18	14	14
P 981 1 TRANSMISSION LINES - CALCULATE STANDING WAVE RATIOS (SWR)	9	0	9	8	17	9	9	9
P 982 1 TRANSMISSION LINES - PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER-WAVELENGTH MATCHING TRANSFORMERS TO MATCH TRANSMISSION LINES TO LOADS	3	0	3	4	8	0	3	3

PCT MBRS RESP *YES*- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFONC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

QY-TSK

	ALL	3	5	7	9	5	5	5
	SKL	SKL	SKL	SKL	SKL	US	O's	
P 983 1 TRANSMISSION LINES - WORK WITH LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS	7	0	7	8	17	6	7	
P 984 1 TRANSMISSION LINES - WORK WITH LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING	3	0	3	5	8	0	3	
P 985 1 TRANSMISSION LINES - USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (ZO)	8	0	6	11	17	1	7	
P 986 1 TRANSMISSION LINES - CALCULATE THE CHARACTERISTIC IMPEDANCE (ZO)	3	0	3	4	0	0	3	
P 987 1 TRANSMISSION LINES - USE OR REFER TO THE TERM CUT OFF FREQUENCY	4	0	3	7	8	3	4	
P 988 1 TRANSMISSION LINES - USE OR REFER TO THE TERM VELOCITY FACTOR (K)	1	0	1	2	0	0	1	
P 989 1 TRANSMISSION LINES - COMPUTE THE ELECTRICAL LENGTH OF LINES FOR PARTICULAR FREQUENCIES	4	0	4	4	8	3	5	
P 990 1 TRANSMISSION LINES - CONSTRUCT LINES OF PARTICULAR ELECTRICAL LENGTHS FOR GIVEN FREQUENCIES	4	0	5	2	8	6	6	
P 991 1 TRANSMISSION LINES - USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES REMAIN CONSTANT, THE ELECTRICAL LENGTH INCREASES	4	0	4	5	8	3	5	
P 992 1 TRANSMISSION LINES - WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES - WORK WITH RESONANT	6	0	6	7	8	6	7	
P 993 1 TRANSMISSION LINES - WORK WITH LINES WHICH ARE MATCHED TO LOADS USING SLUG MATCHING	7	0	5	10	8	3	5	
P 994 1 TRANSMISSION LINES - WORK WITH LINES WHICH ARE MATCHED TO LOADS USING SLUG MATCHING	7	0	6	9	8	0	7	
P 995 2 WAVEGUIDES OR CAVITY RESONATORS - WORK WITH WAVEGUIDES OR CAVITY RESONATORS - INSPECT	56	100	60	49	67	62	60	WAVEGUIDES AND CAVITY RESONATORS
P 996 2 WAVEGUIDES OR CAVITY RESONATORS - CLEAN	53	100	57	46	67	56	58	
P 997 2 WAVEGUIDES OR CAVITY RESONATORS - PRESSURIZE	48	0	52	42	25	50	52	
P 998 2 WAVEGUIDES OR CAVITY RESONATORS - PURGE	43	0	45	41	8	41	46	
P 999 2 WAVEGUIDES OR CAVITY RESONATORS - TROUBLESHOOT	28	0	28	27	0	26	29	
P1000 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL WAVEGUIDES	42	0	49	34	33	44	49	
P1001 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL WAVEGUIDES	47	0	52	39	33	56	52	
P1002 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL WAVEGUIDE SECTIONS	52	100	57	43	33	56	58	
P1003 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL DUMMY LOADS	46	0	50	39	33	44	52	
P1004 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL E BENDS	26	0	27	25	25	26	27	
P1005 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL H BENDS	24	0	24	24	25	24	24	
P1006 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL OTHER BENDS	35	100	40	27	17	41	39	
P1007 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL CHOKE JOINTS	22	0	21	22	17	21	21	
P1008 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL ROTATING JOINTS	43	0	45	39	33	44	46	
P1009 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL DIRECTIONAL COUPLERS	48	0	54	40	33	53	54	

OCCUPATIONAL ANALYSIS PROGRAM USAFONC (ATC) RANDOLPH AFB TX

PCT MRS RESP 'YES' - 303X3 DAFSC/CONUS/OS GRPS

TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

DY-TASK

	3	5	7	9	5	5	
	ALL	SKL	SKL	SKL	US	O's	
	SPC	SPC	SPC	SPC	SPC	SPC	
	018	019	020	021	022	028	
P1010 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL BIDIRECTIONAL COUPLERS	26	0	26	25	33	24	27
P1011 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL WAVEGUIDE SHUTTERS	32	0	37	25	25	32	38
P1012 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL TRANSMIT (TR) OR ANTI-TRANSMIT (ATRI) TUBES	42	0	47	35	33	38	49
P1013 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO "A" WALL OF WAVEGUIDES	9	0	8	10	17	6	8
P1014 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO "B" WALL OF WAVEGUIDES	8	0	7	9	17	6	7
P1015 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO CUT OFF FREQUENCY	11	0	11	10	0	6	12
P1016 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO FREQUENCY-DETERMINING WALL	10	0	11	9	8	6	12
P1017 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO POWER-DETERMINING WALL	7	0	6	8	8	3	6
P1018 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS	4	0	4	3	0	0	5
P1019 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS	4	0	5	3	0	3	5
P1020 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS	7	0	8	4	0	3	9
P1021 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" OF WALL SIZE OF .7 WAVELENGTHS OF THE OPERATING FREQUENCY	4	0	4	4	8	3	4
P1022 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35 AS AN AVERAGE	4	0	4	5	8	3	4
P1023 2 WAVEGUIDES OR CAVITY RESONATORS - COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION	3	0	3	2	0	3	3
P1024 2 WAVEGUIDES OR CAVITY RESONATORS - USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "C" FIELD, OR DIRECTION OF "H" LINES IN WAVEGUIDES	7	0	6	8	0	6	6
P1025 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES	3	0	4	1	0	0	4
P1026 2 WAVEGUIDES OR CAVITY RESONATORS - MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES	2	0	3	1	0	0	4
P1027 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES	3	0	3	2	0	0	4
P1028 2 WAVEGUIDES OR CAVITY RESONATORS - ENERGY COUPLING USED - HIGH POWER PROBES	16	0	16	17	42	15	16
P1029 2 WAVEGUIDES OR CAVITY RESONATORS - ENERGY COUPLING USED - LOW POWER PROBES	16	0	13	20	42	18	13
P1030 2 WAVEGUIDES OR CAVITY RESONATORS - ENERGY COUPLING USED - LOOPS	20	0	15	27	58	9	17
P1031 2 WAVEGUIDES OR CAVITY RESONATORS - ENERGY COUPLING USED - APERTURES (WINDOWS OR IRISES)	30	0	29	31	42	24	11

TASK GROUP SUMMARY

DY-TSK

PI032 2 WAVEGUIDES OR CAVITY RESONATORS - JOINTS USED - CHOKE
PI033 2 WAVEGUIDES OR CAVITY RESONATORS - JOINTS USED - ROTATING
PI034 2 WAVEGUIDES OR CAVITY RESONATORS - JOINTS USED - DON'T
KNOW KIND
PI035 2 WAVEGUIDES OR CAVITY RESONATORS - TUNE CAVITY RESONATORS
USING ELECTRICAL METHODS
PI036 2 WAVEGUIDES OR CAVITY RESONATORS - TUNE CAVITY RESONATORS
USING MECHANICAL METHODS
PI037 2 WAVEGUIDES OR CAVITY RESONATORS - MEASURE THE FREQUENCY
OF SIGNALS ON CAVITY RESONATORS
PI038 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH
KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC
AMPLIFIERS, OR MAGNETRONS
PI039 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - USE OR REFER TO
INTERELECTRODE CAPACITANCE
PI040 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - USE OR REFER TO
ELECTRON TRANSIT TIME
PI041 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - USE OR REFER TO
LEAD INDUCTANCE
PI042 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - USE OR REFER TO
RF LOSSES IN EXTERNAL CIRCUITRY
PI043 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - USE OR REFER TO
PRINCIPLE OF ELECTRON VELOCITY MODULATION
PI044 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - USE OR REFER TO
ELECTRON BUNCHING
PI045 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH TWO-
CAVITY KLYSTRONS
PI046 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH THREE-
CAVITY KLYSTRONS
PI047 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH REFLEX
KLYSTRONS
PI048 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH
TRAVELING-WAVE TUBES (TWT)
PI049 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH
NONDEGENERATIVE PARAMETRIC AMPLIFIERS
PI050 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH UP-
CONVERTER PARAMETRIC AMPLIFIERS
PI051 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH
MAGNETRONS
PI052 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH BACKWARD
WAVE OSCILLATORS (BWO)
PI053 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - INSPECT KLYSTRONS
OR TWT'S
PI054 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - CLEAN KLYSTRONS
OR TWT'S
PI055 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - TUNE KLYSTRONS OR
TWT ELECTRICALLY

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (AIG) RANDOLPH AFB TX

	3	5	7	9	5	5
	ALL	SKL	SKL	SKL	US	O's
	SPC	SPC	SPC	SPC	SPC	SPC
	018	C19	C20	D21	D22	D27
						328

16	0	15	22	58	26	14
47	0	46	47	67	41	47
13	100	18	4	0	15	10

30 0 32 27 25 24 39

38	0	41	32	42	32	43
34	0	36	30	42	20	40

55	100	58	51	67	53	59
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16 0 16 16 A 9 17

15	0	15	13	8	6	17
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21	0	25	13	25	10	26
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12	0	11	14	8	9	11
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7 0 7 7 8 6 7

3 0 3 4 6 2

24	0	23	25	25	29	22
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8 0 9 7 8 12 7

54	0	57	49	58	47	59
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26	0	15	10	17	15	16
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34	0	37	31	58	29	39
29	0	32	24	17	26	34

25 0 27 22 25 21 28

100

PCT MORS RESP 'YES' - 303X3 DAFSC/CONUS/05 GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOPC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	ALL	3	5	7	9	5	5	5
	SKL	SKL	SKL	SKL	SKL	US	SPC	O's
	SPC	SPC	SPC	SPC	SPC	SPC	SPC	SPC
	018	019	020	021	022	027	028	
DI-TSK								
P1056 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - TUNE KLYSTRONS OR TWT MECHANICALLY	24	0	26	21	25	18	29	
P1057 3 MICROWAVE AMPLIFIERS OR OSCILLATORS - PERFORM OPERATIONAL CHECKS OF KLYSTRONS OR TWT	36	0	39	32	31	41	40	
P1058 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - TROUBLESHOOT KLYSTRONS OR TWT	34	0	35	32	25	3	37	
P1059 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - REMOVE OR REPLACE COMPLETE KLYSTRON OR TWT	37	0	40	32	25		41	
P1060 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS	17	0	19	14		21	19	
P1061 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - INSPECT PARAMETRIC AMPLIFIERS	12	0	13	10	50	9	13	
P1062 3 PARAMETRIC AMPLIFIERS - CLEAN	10	0	12	7	17	9	12	
P1063 3 PARAMETRIC AMPLIFIERS - ADJUST	11	0	12	9	25	9	12	
P1064 3 PARAMETRIC AMPLIFIERS - TUNE	10	0	11	9	25	9	11	
P1065 3 PARAMETRIC AMPLIFIERS - PERFORM OPERATIONAL CHECKS	13	0	14	11	33	15	14	
P1066 3 PARAMETRIC AMPLIFIERS - TROUBLESHOOT	12	0	14	9	25	12	14	
P1067 3 PARAMETRIC AMPLIFIERS - REMOVE OR REPLACE	12	0	12	11	25	9	13	
P1068 3 PARAMETRIC AMPLIFIERS - REMOVE OR REPLACE COMPONENTS	7	0	8	7	17	6	7	
P1069 3 MAGNETRONS - INSPECT	51	0	54	45	58	44	57	
P1070 3 MAGNETRONS - CLEAN	45	0	50	37	25	41	52	
P1071 3 MAGNETRONS - ADJUST	45	0	51	37	25	41	53	
P1072 3 MAGNETRONS - TUNE	49	0	53	44	25	44	55	
P1073 3 MAGNETRONS - PERFORM OPERATIONAL CHECKS	52	0	55	46	42	44	59	
P1074 3 MAGNETRONS - TROUBLESHOOT	48	0	53	42	25	41	56	
P1075 3 MAGNETRONS - REMOVE OR REPLACE	50	0	55	43	25	44	57	
P1076 3 MAGNETRONS - REMOVE OR REPLACE COMPONENTS	19	0	19	18	0	12	21	
P1077 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTOR PLATES	6	0	5	8	8	6	4	
P1078 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER CAVITIES	5	0	3	8	4	3	3	
P1079 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER GRIDS	5	0	3	8	8	3	2	
P1080 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF FEEDBACK LOOPS	6	0	4	8	8	3	4	
P1081 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF DRIFT SPACES	4	0	2	7	4	0	2	
P1082 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER GRIDS	4	0	2	8	8	0	2	
P1083 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER CAVITIES	5	0	7	8	4	3	2	
P1084 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF CONTROL GRIDS	7	0	6	9	4	6	6	
P1085 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODES	8	0	7	9	4	6	7	
P1086 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF REPELLER (REFLECTOR) PLATES	24	0	26	21	42	9	29	

PCI MBS RESP *YES*- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

	ALL	3	5	7	9	5	5	5
	SKL	SKL	SKL	SKL	SKL	US	O's	
	SPC	SPC	SPC	SPC	SPC	SPC	SPC	
	018	019	020	021	022	027	028	
P1087 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF GRIDS	22	0	24	18	33	9	27	
P1088 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF GRID CAVITY GAPS	17	0	10	13	25	9	22	
P1089 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF RESONANT CAVITIES	22	0	24	21	33	12	26	
P1090 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNETIC COUPLING LOOPS	18	0	19	16	42	6	22	
P1091 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENTS	24	0	26	20	33	15	29	
P1092 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODES	23	0	25	20	33	12	27	
P1093 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF OUTPUT LEADS	24	0	25	22	33	9	29	
P1094 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENTS OF	16	0	14	19	8	15	15	
P1095 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODES OF	14	0	12	17	8	15	13	
P1096 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF MODULATOR GRIDS OF	12	0	11	14	8	15	11	
P1097 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF ANODES OF	14	0	12	17	8	15	12	
P1098 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF HELICES OF	13	0	10	17	8	9	11	
P1099 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTORS OF	15	0	13	17	8	15	13	
P1100 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNETS OF	12	0	10	14	8	15	10	
P1101 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF ATTENUATORS OF	14	0	13	16	8	15	13	
P1102 3 PARAMETRIC AMPLIFIERS - PERFORM TASKS ON FERRITE CIRCULATORS	7	0	5	10	17	6	5	
P1103 3 PARAMETRIC AMPLIFIERS - PERFORM TASKS ON SIGNAL CAVITIES	6	0	5	9	25	6	4	
P1104 3 PARAMETRIC AMPLIFIERS - PERFORM TASKS ON IDLER CAVITIES	6	0	5	9	25	3	5	
P1105 3 PARAMETRIC AMPLIFIERS - PERFORM TASKS ON VARACTOR DIODES	8	0	6	11	25	6	6	
P1106 3 PARAMETRIC AMPLIFIERS - PERFORM TASKS ON FERRITE ISOLATORS	7	0	6	9	25	6	6	
P1107 3 PARAMETRIC AMPLIFIERS - PERFORM TASKS ON REVERSE-BIAS BATTERIES	3	0	3	3	25	3	3	
P1108 3 MAGNETRONS - PERFORM TASKS ON ANODES OF	12	0	12	13	17	9	13	
P1109 3 MAGNETRONS - PERFORM TASKS ON ANODE COOLING PINS OF	9	0	10	8	8	3	11	
P1110 3 MAGNETRONS - PERFORM TASKS ON COUPLING LOOPS OF	11	0	10	12	17	0	13	
P1111 3 MAGNETRONS - PERFORM TASKS ON HEATER LEADS OF	20	0	20	21	25	9	22	
P1112 3 MAGNETRONS - PERFORM TASKS ON RESONANT CAVITIES OF	17	0	17	17	4	12	18	
P1113 3 MAGNETRONS - PERFORM TASKS ON CATHODES OF	13	0	13	14	17	9	14	
P1114 3 MAGNETRONS - PERFORM TASKS ON MAGNETS OF	21	0	22	20	25	15	24	
Q1115 1 REGISTERS - USE OR REFER TO STORAGE	23	0	20	28	33	24	20	REGISTERS

PCT MBRS RESP *YES*- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

ALL	3	5	7	9	5	5
SKL	SKL	SKL	SKL	SKL	US	O's
SPC	SPC	SPC	SPC	SPC	SPC	SPC
018	019	020	021	022	027	028

Q1116 1 REGISTERS - USE OR REFER TO SHIFT
Q1117 1 REGISTERS - USE OR REFER TO LOGIC SYMBOLS OF SHIFT
Q1118 1 REGISTERS - USE OR REFER TO LOGIC SYMBOLS OF STORAGE
Q1119 1 REGISTERS - TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT
Q1120 1 REGISTERS - TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF REGISTER OTHER THAN SHIFT OR STORAGE
Q1121 1 REGISTERS- DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES HAVE PASSED

Q1122	2	STORAGE DEVICES - WORK WITH	15	0	13	18	17	12	12	14	STORAGE DEVICES
Q1123	2	STORAGE DEVICES - USE OR REFER TO DELAY LINES	12	0	12	13	17	12	13		
Q1124	2	STORAGE DEVICES - USE OR REFER TO MAGNETIC CORES OR IMAGES	6	0	4	8	17	6	4		

Q1125 2 STORAGE DEVICES - USE OR REFER TO MAGNETIC DRUMS
Q1126 2 STORAGE DEVICES - USE OR REFER TO MAGNETIC TAPES
Q1127 2 STORAGE DEVICES - USE OR REFER TO ACCESS TIME OR SPEED OF MEMORY SYSTEMS
Q1128 2 STORAGE DEVICE - USE OR REFER TO STORAGE CAPACITY OF MEMORY SYSTEMS
Q1129 2 STORAGE DEVICES - USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS

Q1130	2	STORAGE DEVICES - USE OR REFER TO LOGIC SYMBOL OF DELAY LINES	9	0	8	13	17	6	8
Q1131	2	STORAGE DEVICES - USE OR REFER TO MAGNETIC DISKS	2	0	2	2	8	3	2
Q1132	2	STORAGE DEVICES - USE OR REFER TO THIN FILM	1	0	2	1	8	0	1
Q1133	2	STORAGE DEVICES - USE OR REFER TO SEMICONDUCTOR MEMORY (INTEGRATED) CIRCUITS	10	0	9	13	17	12	9

Q1134 2 STORAGE DEVICES - USE OR REFER TO BUBBLE MEMORY
Q1135 2 STORAGE DEVICES - USE OR REFER TO PUNCH CARDS
Q1136 2 STORAGE DEVICES - USE OR REFER TO PAPER TAPE
Q1137 2 STORAGE DEVICES - USE OR REFER TO RANDOM ACCESS MEMORY (RAM)

Q1138	2	STORAGE DEVICES - USE OR REFER TO READ ONLY MEMORY (ROM)	7	0	6	10	17	9	6
Q1139	2	STORAGE DEVICES - USE OR REFER TO PROGRAMMABLE READ ONLY MEMORY (PROM) <td>6</td> <td>0</td> <td>5</td> <td>8</td> <td>8</td> <td>9</td> <td>4</td>	6	0	5	8	8	9	4

Q1140	2	STORAGE DEVICES - USE OR REFER TO TRANSFORMER READ ONLY STORAGE (TROS)	1	0	0	2	8	0	0
Q1141	2	STORAGE DEVICES - USE OR REFER TO CAPACITY READ ONLY STORAGE (CROS) <td>1</td> <td>0</td> <td>1</td> <td>0</td> <td>8</td> <td>3</td> <td>1</td>	1	0	1	0	8	3	1

Q1142 2 STORAGE DEVICES - INSPECT
Q1143 2 STORAGE DEVICES - CLEAN
Q1144 2 STORAGE DEVICES - ALIGN
Q1145 2 STORAGE DEVICES - ADJUST
Q1146 2 STORAGE DEVICES - TROUBLESHOOT MEMORY SYSTEMS
Q1147 2 STORAGE DEVICES - REMOVE OR REPLACE SUBASSEMBLIES OR COMPONENTS

PCT MBRs RESP 'YES'-- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

3 5 7 9 5 5
ALL SKL SKL SKL US O's
SPC SPC SPC SPC SPC
018 019 020 021 022 027 028

Q1148	2	STORAGE DEVICES - TRACE SIGNAL FLOW USING LOGIC DIAGRAMS OR SCHEMATICS	8	0	6	11	17	9	6
Q1149	3	DIGITAL-TO-ANALOG(D/A) OR (ANALOG-TO-DIGITAL(A/D)) CONVERTERS - WORK WITH	18	0	21	15	17	26	20
Q1150	3	DIGITAL-TO-ANALOG(D/A) OR (ANALOG-TO-DIGITAL(A/D)) CONVERTERS - COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL (D/A) CONVERTERS FOR GIVEN INPUT VOLTAGES	9	0	9	10	8	12	9
Q1151	3	DIGITAL-TO-ANALOG(D/A) OR (ANALOG-TO-DIGITAL(A/D)) CONVERTERS - USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL (D/A) CONVERTERS IS DETERMINED BY ADDING THE DENOMINATORS OF THE RESISTORS	6	0	5	7	8	3	6
Q1152	3	DIGITAL-TO-ANALOG(D/A) OR (ANALOG-TO-DIGITAL(A/D)) CONVERTERS - COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC (D/A) CONVERTER	8	0	7	10	17	12	6
Q1153	3	ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - PERFORM TASKS ON SAMPLE FUNCTION	7	0	5	10	8	9	6
Q1154	3	ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - PERFORM TASKS ON HOLD FUNCTION	7	0	5	10	8	6	6
Q1155	3	ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - PERFORM TASKS ON COMPARE FUNCTION	7	0	6	8	17	12	5
Q1156	3	ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - PERFORM TASKS ON DIGITIZE FUNCTION	5	0	4	7	17	9	4
Q1157	3	ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - DON'T KNOW WHICH FUNCTION TASKS PERFORMED ON	5	0	7	3	0	6	7
Q1158	3	ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - USE OR REFER TO SAMPLE FUNCTION	8	0	5	12	8	6	6
Q1159	3	ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - USE OR REFER TO HOLD FUNCTION	7	0	5	12	8	6	5
Q1160	3	ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - USE OR REFER TO COMPARE FUNCTION	7	0	5	10	17	9	5
Q1161	3	ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - USE OR REFER TO DIGITAL FUNCTION	7	0	5	11	17	9	5
Q1162	3	ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - PERFORM TASKS ON MECHANICAL (A/D) CONVERTERS	7	0	9	6	17	9	7
Q1163	3	ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - PERFORM TASKS ON ELECTRONIC A/D CONVERTERS	10	0	9	12	17	15	8
Q1164	3	DIGITAL-TO-ANALOG (D/A) CONVERTER CIRCUITS - PERFORM TASKS ON	9	0	9	11	17	15	8
R1165	1	PHANTASTRON - WORK WITH PHANTASTRON CIRCUITRY	28	0	31	22	25	21	16
R1166	2	SCHMITT TRIGGER CIRCUITS - WORK WITH	23	0	23	24	33	21	24
R1167	2	SCHMITT TRIGGER CIRCUITS - TRACE DATA FLOW THROUGH SCHEMATIC DIAGRAMS OF	18	0	17	21	25	15	18
R1168	2	SCHMITT TRIGGER CIRCUITS - USE OR REFER TO LOGIC SYMBOLS FOR	17	0	16	20	33	15	17
R1169	3	CABLE FABRICATION - FABRICATE MULTICONDUCTOR CABLES	44	0	47	39	33	44	48
R1170	3	CABLE FABRICATION - FABRICATE COAXIAL CABLES	51	0	57	42	33	54	54
S1171	1	INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - WORK WITH DEVICES	34	0	36	30	50	38	37

PCT MORS RESP 'YES'- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

ALL	3	5	7	9	5	5
SKL	SKL	SKL	SKL	SKL	US	O's
SPC	SPC	SPC	SPC	SPC	SPC	SPC
019	019	020	021	022	027	028

S1172	1	INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO KEYBOARDS OR TELETYPEWRITERS	17	0	17	17	25	12	19
S1173	1	INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO PRINTERS	17	0	18	16	33	21	19
S1174	1	INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO TAPE DRIVES (UNITS)	21	0	11	13	8	12	11
S1175	1	INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO CARD READERS/CARD PUNCH	2	0	1	5	17	0	1
S1176	1	INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO VIDEO DISPLAYS (CRTS)	26	0	29	22	50	32	29
S1177	1	INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO MIXIE LIGHTS (TUBES)	24	0	26	22	33	35	24
S1178	1	INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO LEDs	20	0	22	17	25	26	21
S1179	1	INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO LCDS	7	0	6	9	17	9	6
S1180	1	INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO INCANDESCENT DISPLAYS	12	0	11	14	17	9	12
S1181	1	INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO TOGGLE OR PUSH BUTTON SWITCH INPUTS	28	0	30	25	50	35	29
S1182	1	INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO INTERFACE ADAPTER UNITS	17	0	16	18	8	18	17
S1183	1	INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO TAPE READERS	17	0	15	20	8	9	16
S1184	1	INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO TAPE PUNCHES	14	0	12	17	8	0	14
S1185	2	PHOTO-SENSITIVE DEVICES - WORK WITH	17	0	15	19	17	15	16
S1186	3	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - WORK WITH	22	0	24	20	8	24	24
S1187	3	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - USE OR REFER TO EXCITATION FREQUENCIES	14	0	15	12	8	18	14
S1188	3	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - USE OR REFER TO VOLTAGE-CURRENT PHASE RELATIONSHIPS	11	0	13	7	8	12	14
S1189	3	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - MEASURE CHOPPER COIL EXCITATION FREQUENCIES	11	0	12	8	8	9	13
S1190	3	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - MEASURE CHOPPER COIL VOLTAGE-CURRENT PHASE RELATIONSHIPS	8	0	10	4	8	9	11
S1191	3	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	17	0	18	14	8	18	19
S1192	3	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	16	0	18	12	8	21	17
S1193	3	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	18	0	21	14	8	21	21
S1194	3	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	15	0	16	13	8	18	16
S1195	1	INFRARED SYSTEMS - WORK WITH	0	0	1	0	0	0	1

PHOTO SENSITIVE DEVICES
SYNCHRONOUS VIBRATIONS
(CHOPPER CIRCUITS)

INFRARED SYSTEMS

PCT MBRS RESP *YES* - 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOPC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK

ALL	3	5	7	9	5	5	
SKL	SKL	SKL	SKL	SKL	US	0's	
SPC	SPC	SPC	SPC	SPC	SPC	SPC	
018	019	020	021	022	027	028	
T1196	1	INFRARED SYSTEMS - INSPECT	0	0	0	0	0
T1197	1	INFRARED SYSTEMS - CLEAN	0	0	0	0	0
T1198	1	INFRARED SYSTEMS - SERVICE	0	0	0	0	0
T1199	1	INFRARED SYSTEMS - ADJUST OR CALIBRATE	0	0	0	0	0
T1200	1	INFRARED SYSTEMS - OPERATE	0	0	0	0	0
T1201	1	INFRARED SYSTEMS - TROUBLESHOOT WIRE CONNECTIONS OF	0	0	0	0	0
T1202	1	INFRARED SYSTEMS - TROUBLESHOOT MAJOR ASSEMBLIES OF	0	0	0	0	0
T1203	1	INFRARED SYSTEMS - TROUBLESHOOT TO COMPONENT PARTS	0	0	0	0	0
T1204	1	INFRARED SYSTEMS - REMOVE OR REPLACE MAJOR ASSEMBLIES	0	0	0	0	0
T1205	1	INFRARED SYSTEMS - REMOVE OR REPLACE COMPONENT PARTS	0	0	0	0	0
T1206	1	INFRARED SYSTEMS - USE OR REFER TO FAR REGION	0	0	0	0	0
T1207	1	INFRARED SYSTEMS - USE OR REFER TO INTERMEDIATE REGION	0	0	0	0	0
T1208	1	INFRARED SYSTEMS - USE OR REFER TO NEAR REGION	0	0	0	0	0
T1209	1	INFRARED SYSTEMS - USE OR REFER TO MICRON	0	0	0	0	0
T1210	1	INFRARED SYSTEMS - USE OR REFER TO GRAY BODIES	0	0	0	0	0
T1211	1	INFRARED SYSTEMS - USE OR REFER TO BLACK BODIES	0	0	0	0	0
T1212	1	INFRARED SYSTEMS - USE OR REFER TO ABSORPTION	0	0	0	0	0
T1213	1	INFRARED SYSTEMS - USE OR REFER TO SCATTERING	0	0	0	0	0
T1214	1	INFRARED SYSTEMS - USE OR REFER TO ABSOLUTE ZERO	0	0	0	0	0
T1215	1	INFRARED SYSTEMS - PERFORM TASKS ON BLITZ	0	0	0	0	0
T1216	1	INFRARED SYSTEMS - PERFORM TASKS ON TARGET BUTTONS	0	0	0	0	0
T1217	1	INFRARED SYSTEMS - PERFORM TASKS ON ERECTOR LENSES	0	0	0	0	0
T1218	1	INFRARED SYSTEMS - PERFORM TASKS ON OCULAR LENSES	0	0	0	0	0
T1219	1	INFRARED SYSTEMS - PERFORM TASKS ON CORRECTION LENSES	0	0	0	0	0
T1220	1	INFRARED SYSTEMS - PERFORM TASKS ON FILTERS	1	0	1	2	8
T1221	1	INFRARED SYSTEMS - PERFORM TASKS ON SPHERICAL MIRRORS	0	0	0	0	0
T1222	1	INFRARED SYSTEMS - PERFORM TASKS ON PLANE MIRRORS	0	0	0	0	0
T1223	2	LASER SYSTEMS - WORK WITH	1	0	1	0	3
T1224	2	LASER SYSTEMS - INSPECT	0	0	0	0	0
T1225	2	LASER SYSTEMS - CLEAN	0	0	0	0	0
T1226	2	LASER SYSTEMS - SERVICE	0	0	0	0	0
T1227	2	LASER SYSTEMS - OPERATE	0	0	0	0	0
T1228	2	LASER SYSTEMS - TROUBLESHOOT WIRE CONNECTIONS OF	0	0	0	0	0
T1229	2	LASER SYSTEMS - TROUBLESHOOT MAJOR ASSEMBLIES OF	0	0	0	0	0
T1230	2	LASER SYSTEMS - TROUBLESHOOT TO COMPONENT PARTS	0	0	0	0	0
T1231	2	LASER SYSTEMS - REMOVE OR REPLACE MAJOR ASSEMBLIES	0	0	0	0	0
T1232	2	LASER SYSTEMS - REMOVE OR REPLACE COMPONENT PARTS	0	0	0	0	0
T1233	2	LASER SYSTEMS - USE OR REFER TO ANGSTROMS (A)	0	0	0	0	0
T1234	2	LASER SYSTEMS - USE OR REFER TO ELECTRON ENERGY LEVELS	0	0	0	0	0
T1235	2	LASER SYSTEMS - USE OR REFER TO GROUND STATE	1	0	1	1	0
T1236	2	LASER SYSTEMS - USE OR REFER TO EXCITED STATE	1	0	1	1	0
T1237	2	LASER SYSTEMS - USE OR REFER TO PACKET OF RADIATION	0	0	0	0	0
T1238	2	LASER SYSTEMS - USE OR REFER TO PHOTONS	0	0	0	0	0
T1239	2	LASER SYSTEMS - USE OR REFER TO SPONTANEOUS EMISSION	0	0	0	0	0
T1240	2	LASER SYSTEMS - USE OR REFER TO STIMULATED EMISSION	0	0	0	0	0
T1241	2	LASER SYSTEMS - USE OR REFER TO COHERENCE OR INCOHERENCE	0	0	0	0	0
T1242	2	LASER SYSTEMS - USE OR REFER TO INVERSION LEVEL	0	0	0	0	0

LASERS

PCT MGRS RESP 'YES'- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY

MSI-TSK

T11243 2 LASER SYSTEMS - USE OR REFER TO MONOCHROMATIC
 T11244 2 LASER SYSTEMS - WORK WITH ACTIVE MATERIALS
 T11245 2 LASER SYSTEMS - WORK WITH PUMPING SOURCES
 T11246 2 LASER SYSTEMS - WORK WITH FULL SILVERED (100% REFLECTIVE) MIRRORS.
 T11247 2 LASER SYSTEMS - WORK WITH HALF SILVERED (92% REFLECTIVE) MIRRORS
 T11248 2 LASER SYSTEMS - WORK WITH MELICAL FLASHTUBES
 T11249 2 LASER SYSTEMS - WORK WITH RUBY
 T11250 2 LASER SYSTEMS - WORK WITH HELIUM-NEON
 T11251 2 LASER SYSTEMS - WORK WITH HELIUM-XENON
 T11252 2 LASER SYSTEMS - WORK WITH KENON
 T11253 2 LASER SYSTEMS - WORK WITH CESIUM-HELIUM
 T11254 2 LASER SYSTEMS - WORK WITH ARGON
 T11255 2 LASER SYSTEMS - WORK WITH NEODYMIUM IN GLASS
 T11256 2 LASER SYSTEMS - WORK WITH GALLIUM ARSENIDE
 T11257 3 DISPLAY TUBES - WORK WITH DISPLAY TUBES, SUCH AS DIRECT VIEW STORAGE (DVST), MULTIPLE MODE STORAGE TUBES (MMST), OR SCAN CONVERTER TUBES (SCT)
 T11258 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - INSPECT
 T11259 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - CLEAN
 T11260 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - ADJUST OR CALIBRATE
 T11261 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - OPERATE SYSTEMS THAT CONTAIN OVST OR MMST
 T11262 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - TROUBLESHOOT CIRCUITS
 T11263 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - REMOVE OR REPLACE TUBES FROM MAJOR ASSEMBLIES OR UNITS
 T11264 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF DVST
 T11265 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF MMST
 T11266 3 DISPLAY TUBES - SCAN CONVERTER TUBES (SCT) - PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF SCT
 T11267 3 DISPLAY TUBES - PERFORM TASKS ON FLOOD GUNS
 T11268 3 DISPLAY TUBES - PERFORM TASKS ON WRITE GUNS
 T11269 3 DISPLAY TUBES - PERFORM TASKS ON READ GUNS
 T11270 3 DISPLAY TUBES - PERFORM TASKS ON ATTACK GUNS
 T11271 3 DISPLAY TUBES - PERFORM TASKS ON ERASE GUNS

PCT MBRS RESP *YES*- 303X3 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TXTASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

0Y-TSK

T1272 3 DISPLAY TUBES - PERFORM TASKS ON STORAGE GRIDS									
T1273 4 TELEVISION (TV) SYSTEMS - PERFORM TASKS DEALING WITH TV									
SYSTEMS INCLUDING LOW LIGHT TV									
T1274 4 TELEVISION (TV) SYSTEMS - INSPECT	16	0	17	14	25	32	15		
T1275 4 TELEVISION (TV) SYSTEMS - CLEAN	13	0	15	10	8	26	13		
T1276 4 TELEVISION (TV) SYSTEMS - ADJUST	16	0	17	14	8	32	14		
T1277 4 TELEVISION (TV) SYSTEMS - OPERATE	16	0	17	13	8	32	15		
T1278 4 TELEVISION (TV) SYSTEMS - TROUBLESHOOT WIRE CONNECTIONS OF ASSEMBLIES OF PARTS	14	0	16	13	8	29	14		
T1279 4 TELEVISION (TV) SYSTEMS - TROUBLESHOOT MAJOR ASSEMBLIES OF PARTS	13	0	15	11	8	29	13		
T1280 4 TELEVISION (TV) SYSTEMS - TROUBLESHOOT DOWN TO COMPONENT PARTS	13	0	15	11	8	29	13		
T1281 4 TELEVISION (TV) SYSTEMS - REMOVE OR REPLACE MAJOR ASSEMBLIES	13	0	15	11	8	29	13		
T1282 4 TELEVISION (TV) SYSTEMS - REMOVE OR REPLACE COMPONENT PARTS	13	0	14	10	8	29	12		
U1283 1 PROGRAMMING - PERFORM PROGRAMMING TASKS									
U1284 1 PROGRAMMING - USE OR REFER TO DECIMAL SYSTEMS	11	0	11	12	8	18	9	PROGRAMMING	
U1285 1 PROGRAMMING - USE OR REFER TO OCTAL SYSTEMS	7	0	6	9	8	9	6		
U1286 1 PROGRAMMING - USE OR REFER TO HEXADECIMAL SYSTEMS	7	0	5	9	8	1	6		
U1287 1 PROGRAMMING - USE OR REFER TO 8-4-2-1 SYSTEMS	2	0	2	2	8	3	1		
U1288 1 PROGRAMMING - USE OR REFER TO FOUR SYSTEMS	3	0	3	4	8	6	2		
U1289 1 PROGRAMMING - USE OR REFER TO BINARY SYSTEMS	1	0	2	0	8	1	1		
U1290 1 PROGRAMMING - USE OR REFER TO TIME-SHARING (MULTI-SEQUENCING)	8	0	8	9	8	9	7		
U1291 1 PROGRAMMING - USE OR REFER TO DATA WORDS	3	0	2	3	8	0	2		
U1292 1 PROGRAMMING - USE OR REFER TO ADDRESS WORDS	8	0	6	11	8	12	5		
U1293 1 PROGRAMMING - USE OR REFER TO ADDRESS/SUBADDRESS	8	0	6	11	8	9	5		
U1294 1 PROGRAMMING - USE OR REFER TO STEERING/INFORMATION	7	0	5	11	8	9	4		
U1295 1 PROGRAMMING - USE OR REFER TO INSTRUCTION WORDS	4	0	3	7	8	9	1		
U1296 1 PROGRAMMING - USE OR REFER TO DAP-16	6	0	5	8	8	9	4		
U1297 1 PROGRAMMING - USE OR REFER TO BINARY CODED DECIMAL (BCD)	2	0	1	5	8	0	1		
U1298 1 PROGRAMMING - USE OR REFER TO CONTROL WORDS	6	0	5	8	8	9	4		
U1299 1 PROGRAMMING - USE OR REFER TO RESPONSE WORDS	5	0	4	7	8	6	3		
U1300 1 PROGRAMMING - USE OR REFER TO WRAPAROUND WORDS	4	0	4	5	8	6	4		
U1301 1 PROGRAMMING - USE OR REFER TO TEST OR DIAGNOSTIC PROGRAMS	1	0	1	2	8	3	1		
U1302 1 PROGRAMMING - USE OR REFER TO RELIABILITY PROGRAMS	7	0	6	9	8	3	6		
U1303 1 PROGRAMMING - USE OR REFER TO COMPILERS	5	0	4	7	8	0	4		
U1304 1 PROGRAMMING - USE OR REFER TO ASSEMBLERS	2	0	1	4	8	0	1		
U1305 1 PROGRAMMING - USE OR REFER TO MACHINE LANGUAGE	3	0	2	6	8	0	2		
U1306 1 PROGRAMMING - USE OR REFER TO MNEMONICS	3	0	1	6	8	3	0		
U1307 1 PROGRAMMING - USE OR REFER TO ROUTINES OR SUBROUTINES	5	0	2	10	8	3	2		
U1308 1 PROGRAMMING - USE OR REFER TO FLOW CHARTS OR DIAGRAMS	5	0	3	8	8	3	2		
U1309 1 PROGRAMMING - USE OR REFER TO ATLAS	0	0	0	0	8	0	0		
U1310 1 PROGRAMMING - USE OR REFER TO ELAN	0	0	0	0	8	0	0		

PCT MBR5 RESP 'YES'- 303X3 DAFSC/CONUS/OS GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

OCCUPATIONAL ANALYSIS PROGRAM
USAFOPC (ATC) RANDOLPH AFB TX

Task	1	3	5	7	9	5	5	5
	SKL	SKL	SKL	SKL	SKL	US	O's	
	SPC	SPC	SPC	SPC	SPC	SPC	SPC	
	018	019	020	021	022	027	028	
U1311 1 PROGRAMMING SYSTEMS - PERFORM TASKS ON SINGLE LEVEL PROGRAMMING	4	0	4	5	0	6	4	
U1312 1 PROGRAMMING SYSTEMS - PERFORM TASKS ON MULTI-LEVEL PROGRAMMING	2	0	2	2	0	0	2	
U1313 1 PROGRAMMING - WRITE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC ACUITS	2	0	1	3	0	0	1	
U1314 1 PROGRAMMING - USE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC ACUITS	6	0	6	7	8	0	7	
U1315 1 DIGITAL COMPUTERS - PERFORM TASKS ON CONTROL SECTIONS	4	0	4	5	8	0	4	
U1316 1 DIGITAL COMPUTERS - PERFORM TASKS ON INPUT SECTIONS	5	0	5	7	8	0	6	
U1317 1 DIGITAL COMPUTERS - PERFORM TASKS ON OUTPUT SECTIONS	5	0	5	7	8	0	6	
U1318 1 DIGITAL COMPUTERS - PERFORM TASKS ON MONITOR SECTIONS	4	0	3	5	8	0	4	
U1319 1 DIGITAL COMPUTERS - PERFORM TASKS ON TRANSMIT SECTIONS	3	0	2	5	8	0	2	
U1320 1 DIGITAL COMPUTERS - PERFORM TASKS ON RECEIVE SECTIONS	3	0	2	5	8	0	2	
U1321 1 DIGITAL COMPUTERS - PERFORM TASKS ON INPUT DEVICES	6	0	5	7	8	9	4	
U1322 1 DIGITAL COMPUTERS - PERFORM TASKS ON STORAGE DEVICES	4	0	4	5	8	9	3	
U1323 1 DIGITAL COMPUTERS - PERFORM TASKS ON OUTPUT DEVICES	6	0	5	7	8	9	4	
U1324 1 DIGITAL COMPUTERS - PERFORM TASKS ON POWER DEVICES	5	0	5	7	8	9	4	
U1325 1 DIGITAL COMPUTERS - PERFORM TASKS ON MONITOR DEVICES	4	0	4	5	8	6	4	
U1326 1 MICROPROCESSOR BASED EQUIPMENT - USE OR PERFORM TASKS ON	3	0	3	4	1	8	3	
U1327 2 DB AND POWER RATIOS - USE DECIBELS TO EXPRESS	57	0	59	54	75	47	61	DB AND POWER RATIO
U1328 2 DB AND POWER RATIOS - USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS	21	0	22	19	42	24	22	
U1329 2 DB AND POWER RATIOS - USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS	21	0	22	19	42	24	22	
U1330 2 DB AND POWER RATIOS - USE VTVM (DB METERS) TO CHECK FOR NOISE OR SIGNAL LEVEL	42	0	46	35	67	35	48	
U1331 2 DB AND POWER RATIOS - USE VTVM (DB METERS) TO CHECK OR ADJUST AUDIO AMPLIFIERS	18	0	19	17	33	18	19	
U1332 2 DB AND POWER RATIOS - USE A HP3550 OR 344A TEST SET TO ALIGN AUDIO EQUIPMENT	2	0	3	1	17	3	3	
U1333 DUMMY TASK TO INCLUDE AIRMEN WITH NO EPI TASK RESPONSES	12	0	11	14	0	6	12	